

SCN iConnect Client System

version 3.1



User Manual

for Windows Installation

Aug 07, 2006

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I. How to install the iConnect Client

A. What are the system requirements of the iConnect Client

For optimum running level, the iConnect Client System is required to be installed in a computer with the following specifications:

- Pentium III 800MHz or a higher or equivalent CPU with least 256 MB RAM.
- Any Windows Operating System that supports Java Runtime Environment (JRE) version 1.5 or higher. Some examples of these are:
 - Windows 95, 98, ME
 - Windows NT 4.0 service pack 5
 - Windows 2000
 - Windows XP
- Minimum screen resolution is 600 x 800. Recommended screen resolution is 1024 x 768 for better viewing of the interface.
- Minimum free hard drive space is about 200mb.

B. How to install the iConnect Client

The iConnect Client v3.1 setup program is needed for the installation. A copy of this program can be obtained from the iConnect download site at <https://www.iconnect.net.ph/downloads> or can be requested by calling our technical support group. This application requires Administrator rights to install the iConnect Client application.

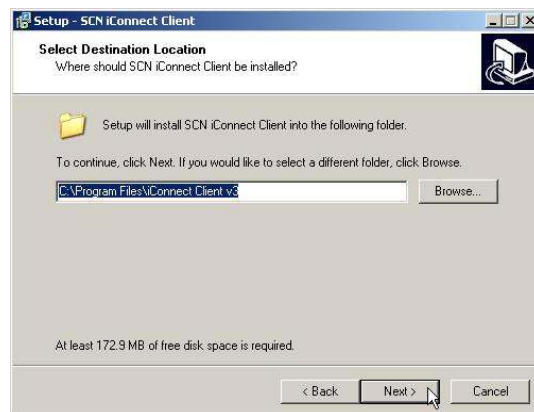
1. Double click the iConnect Client v3.1 setup program to begin the installation.



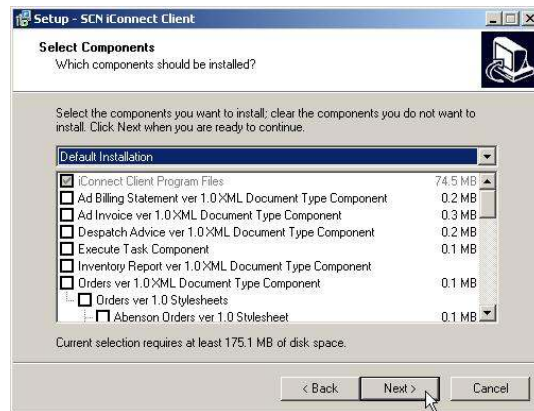
2. The setup window will open. Click the **Next** button to continue.



3. Select the folder on where to store the iConnect Client. Enter the full path of the folder or click the **Browse** button to choose a folder. Click the **Next** button to continue.



4. Select the components of the iConnect Client to install. Click the **Next** button to continue.



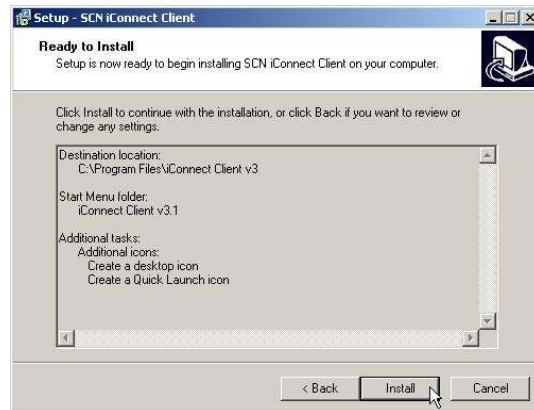
5. Select the folder on where to install iConnect Client shortcuts in the Start Menu. Click the **Next** button to continue.



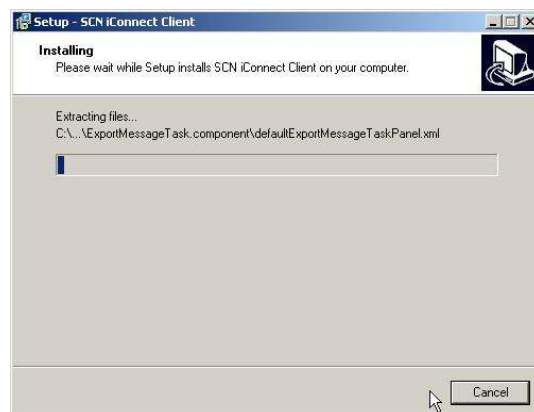
6. Select other locations to install additional iConnect Client shortcuts.



7. Review the installation configuration that was chosen. To change the configurations, click the **Back** button. To continue with the installation, click the **Install** button.



8. Wait until the installation has been completed.



9. To start the iConnect Client after the installation has completed, mark the **Launch iConnect Client** checkbox. Click the **Finish** button to close the setup window.



C. What needs to be set up in the iConnect Client

There are a few other things that need to be set up in the iConnect Client to run the application properly and according to the user's requirements.

1. Identity

The iConnect Client needs to be uniquely identified in the server to create, send, and receive messages. Refer to [How to set up the Identity](#) in section **IV.A** for more details.

2. Additional Components

Some users may need additional components that are not included in the iConnect Client installer. These components can be a task, an XML document, a stylesheet for an XML document, a preconfigured setup, or an update. Refer to [How to update the iConnect Client](#) in section **V** for more details.

3. Connection

Dial-up accounts and proxy server settings may be needed to be configured in the iConnect Client. Refer to [How to set up the Connection](#) in section **IV.B** for more details.

4. Contact List

A Contact List contains internal codes of an entity that are needed to determine the recipient of a non-XML Document file. Refer to [How to set up the Contact List](#) in section **IV.C** for more details.

5. Tasks

Tasks can simplify some common actions being done in the iConnect Client by predefining the values that are needed to perform specific actions. Refer to [How to set up a Task](#) in section **IV.D** for more details.

6. Task Groups

Tasks can only be executed after it has been assigned to a Task Group. Task Groups can also be used to group together some task to execute a sequence of tasks by a single click. Refer to [How to set up a Task Group](#) in section **IV.E** for more details.

7. XML Documents

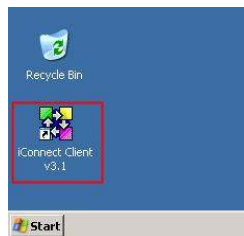
XML Document settings are needed to be configured if the user needs a more specific format and mapping configuration. Refer to [How to set up an XML Document](#) in section **IV.F** for more details.

8. Scheduler

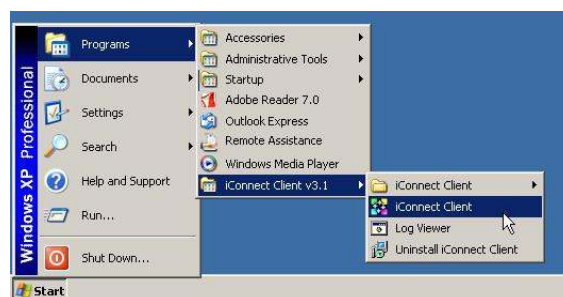
A Task Group may be automatically executed by defining the time it will run. Refer to [How to set up the Scheduler](#) in section **IV.G** for more details.

II. How to start the iConnect Client

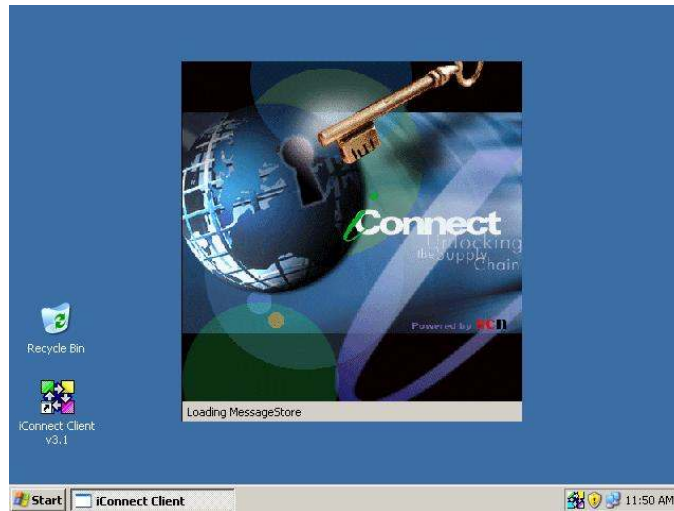
The iConnect Client can be started by double clicking the iConnect Client icon found in the desktop.



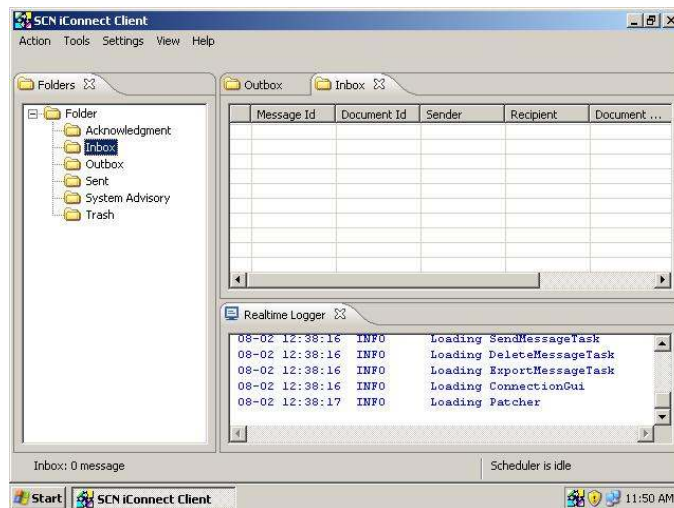
It can also be started by clicking the iConnect Client icon found in the Start Menu. Click on ***Start – All Programs – iConnect Client v3.1 – iConnect Client.***



The iConnect Client splash screen will open.



The iConnect Client window will open after it has been initialized.



Notice that an iConnect Client icon will appear on the system tray.



III. What is the iConnect Client interface

The iConnect Client consists of the Folder panel, Message Table panel and the Realtime Logger panel.

A. Folder Panel

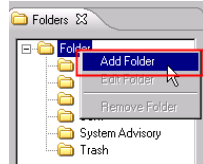
The Folder panel shows all the folders in the iConnect Client. By default, the iConnect Client has the following folders which contain messages based on their status and document type:

- **Acknowledgment:** contains messages received from the server that has a document type of "Acknowledgement" or "Error".
- **Inbox:** contains messages received from the server that do not have the document type of "Acknowledgement", "Error" or "System Advisory"
- **Outbox:** contains created messages that are ready to be sent to the server
- **Sent:** contains messages that have been sent to the server
- **System Advisory:** contains messages received from the server that has a document type of "System Advisory"
- **Trash:** contains messages that have been deleted

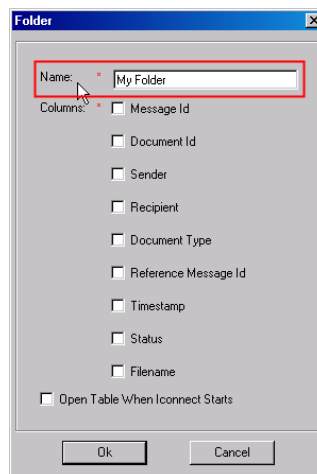
1. How to create a new Folder

New folders can be created if the user sees the need for it.

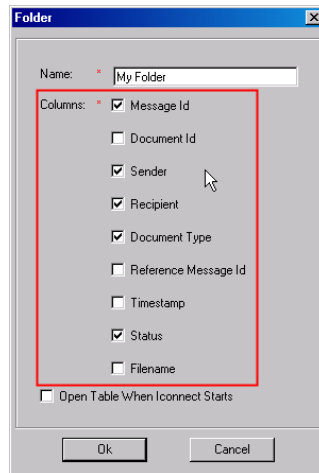
- a. Right click on the folder that will be the parent of the new folder. Select **Add Folder**.



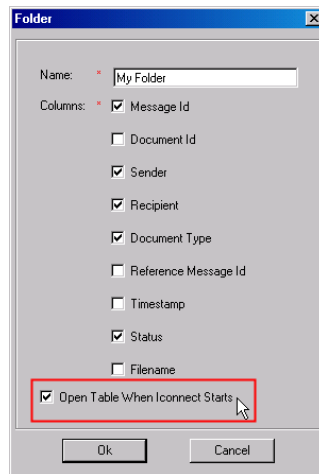
- b. A **Folder** dialog will open. Enter the name for the new folder.



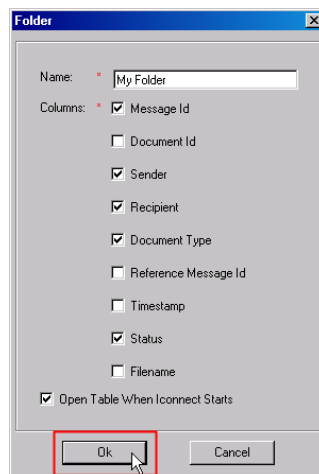
- c. Select the columns that will be present when viewing the content of the folder.



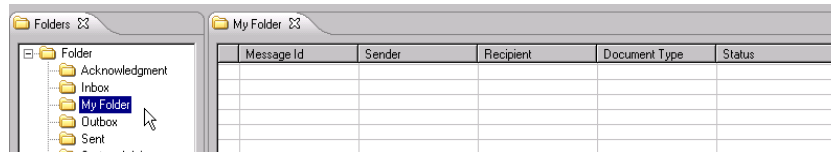
- d. The new folder can be automatically opened when the iConnect Client has started by marking the ***Open Table When Iconnect Starts*** checkbox.



- e. Click ***Ok*** to save the new folder.



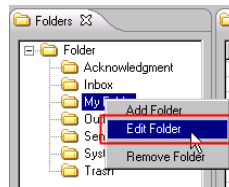
The example above will produce this output.



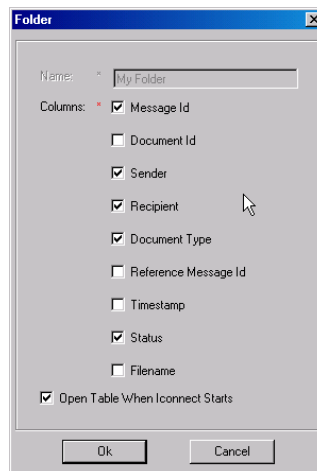
2. How to edit an existing Folder

Existing folders can be edited except for the folder's name.

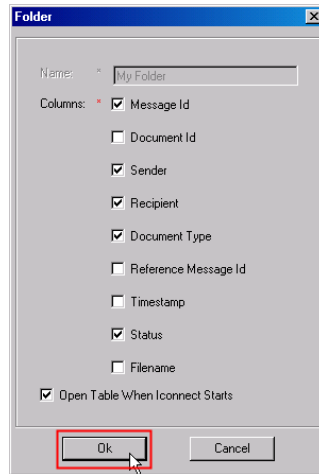
- a. Right click on the folder that will be edited. Select **Edit Folder**.



- b. The **Folder** dialog will open. Make the changes for the folder.



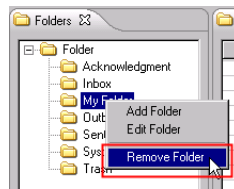
- c. Click **Ok** to save the changes for the folder.



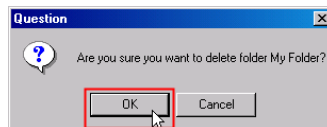
3. How to delete an existing Folder

User created folders can be deleted. However, the folder must be empty before it can be removed.

- a. Right click on the folder that will be deleted. Select **Remove** Folder.

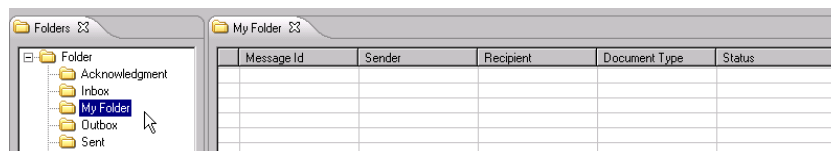


- b. Click **Ok** to confirm the deletion of the folder.

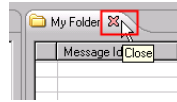


B. Message Table Panel

The messages in each folder can be seen on the Message Table panel. To open a Message Table panel, click on the folder to open from the Folder panel. A Message Table panel will appear with a tab labeled with the same name of the folder.



Message Table panels can be closed by clicking on the **X** on the right side of the tab.

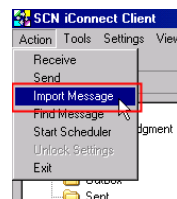


The details of the message can be seen on the Message Table panel depending on what columns are selected to be displayed for a particular folder. Refer to [How to edit an existing Folder](#) in section **III.A.2** for details on how to change the columns to be displayed for a folder. The content of each columns are as follows:

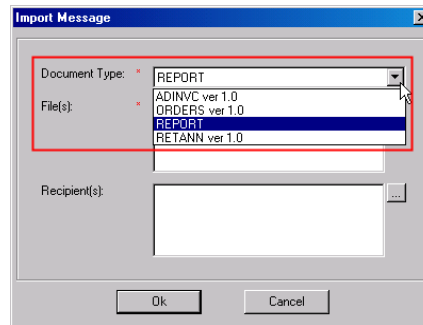
- **Read:** a flag that indicates whether the message has been opened or exported
- **Message Id:** an iConnect server generated ID to uniquely identify a particular message
- **Document Id:** an internal ID of an XML document message (generated by the user's system) to uniquely identify the content of the message
- **Sender:** the message correspondent
- **Recipient:** the receiver of the message
- **Document Type:** the type of message
- **Reference Message Id:** the message ID of the message it is related to
- **Timestamp:** the time the message was sent to the server
- **Status:** the condition of the message which can be as follows:
 - **PENDING:** newly created message that is ready to be sent
 - **SENT:** message that has been delivered to the iConnect server
 - **DELIVERED:** message that is ready to be picked up by the recipient
 - **RECEIVED:** message that is retrieved from the iConnect Server
 - **EXPORTED:** retrieved message where its content has already been extracted
 - **UNSENT:** message that failed to be sent to the iConnect server
- **Filename:** the filename from where the content of the message was imported from
- **Folder:** the folder of the message


1. How to create a message

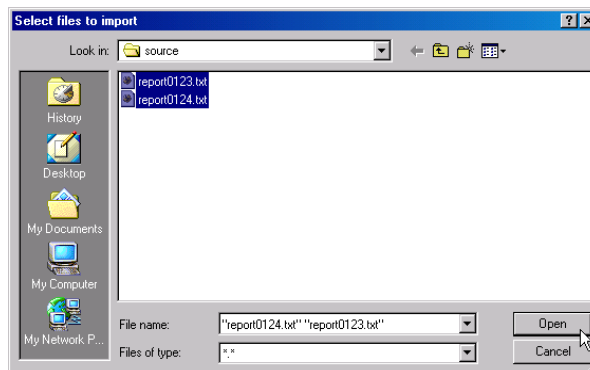
- a. On the menu bar, click **Action – Import Message**



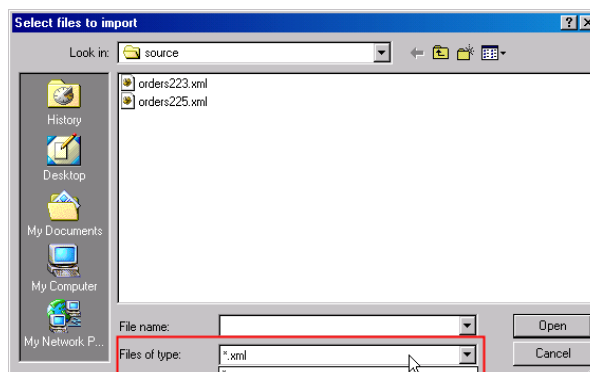
- b. The **Import Message** dialog will open. Select the document type of the new message from the list. Refer to [How to set up Task for Import Message](#) in section **IV.D.1** for details on how to add document types for importing non XML document messages.



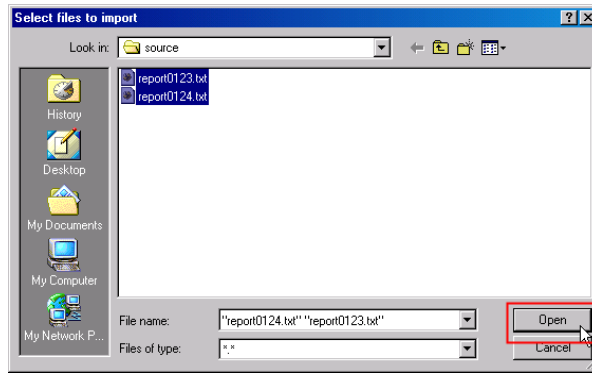
- c. Set files to be imported. Click the  button to open the file dialog.
- d. Locate and select the file to be imported from the file dialog. Multiple files can be selected.



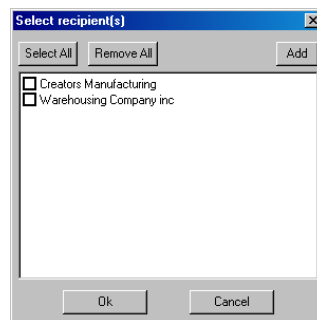
When importing files for an XML Document, only files Comma Separated Value (**.csv**) and Extensible Markup Language (**.xml**) files can be selected. Choose the type of file to import from the **Files of Type** list.



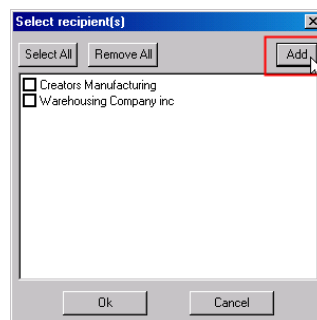
Click **Open** to confirm the selected files.



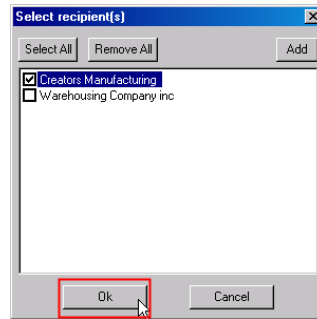
- e. Set the recipients for the new message. Click the  button to open the list of recipients.



- f. Select the recipients for the new message. New contacts can be added by clicking on the **Add** button. Refer to [How to set up the Contact List](#) in section **IV.C** for details on how to add new contact details.

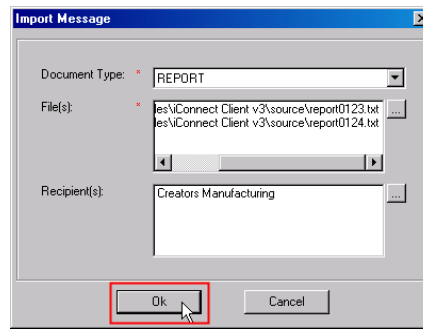


Click **Ok** to confirm the selected recipients.

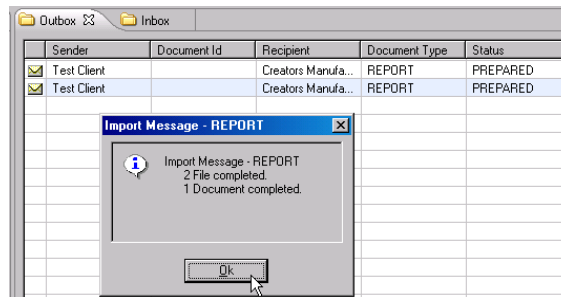


Take note that an XML document message already has a defined recipient in its content. Having more than one recipient will create copies of the message for each of the recipients.

- g. Click **Ok** to create the new message.

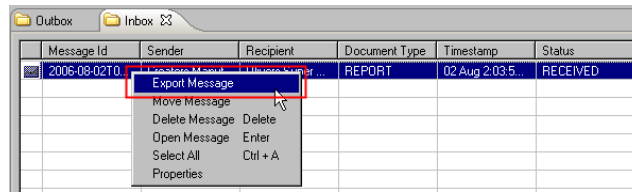


The example above will produce this result.

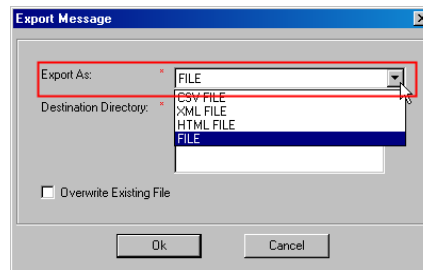


2. How to export a message

- a. Select the messages that will be exported from the Message Table panel. Right click on them, then select **Export Message** from the popup menu.




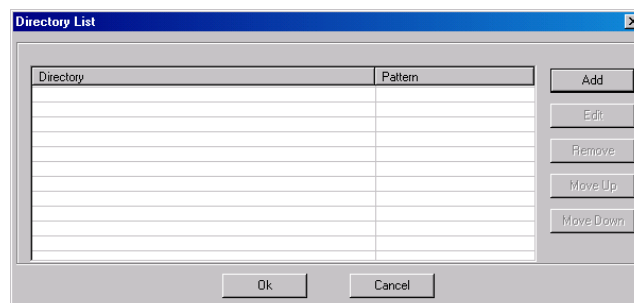
- b. The **Export Message** dialog will open. Select the type of file where the content of the messages will be exported to. These types are as follows:
 - **CSV FILE**: export content of the XML document message as a comma separated value file
 - **XML FILE**: export content of the XML document message as an extensible markup language file
 - **HTML FILE**: export content of the XML document message using a stylesheet
 - **FILE**: export the content of the message as is



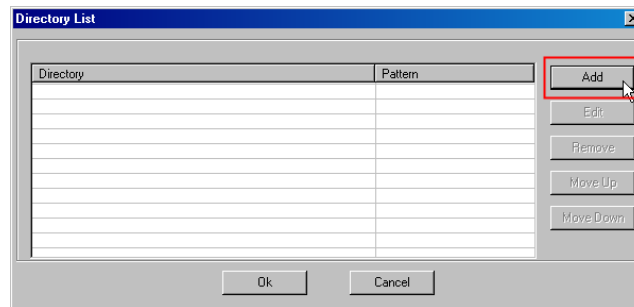
The iConnect Client will automatically export the content of the message as **FILE** for non XML documents.

Content of the messages exported as **FILE** will be saved using its original file name. On the other hand, contents of the messages exported as **CSV**, **XML**, or **HTML FILE** will be saved using a generated file name based on the details of the message. Refer to [How to set up Export XML File Name Templates](#) on section **IV.F.3** for details on generating file names.

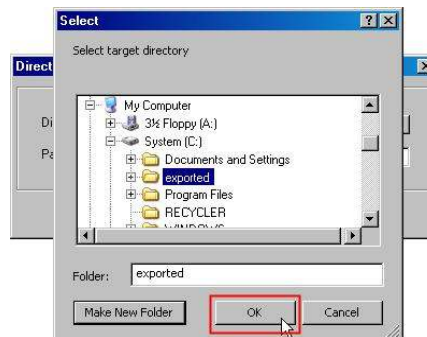
- c. Set the directory to save the exported content. Click on the  button to open the **Directory List** dialog.



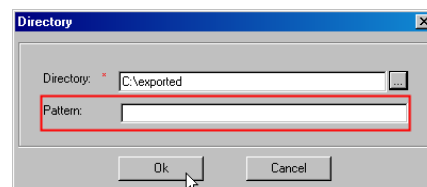
- d. On the **Directory List** dialog, click **Add** button.



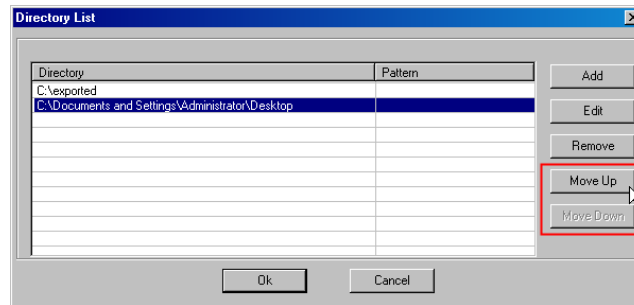
- e. The **Directory** dialog will open. Click the  button and select the directory from the list. Click **Ok** to confirm the selected directory.



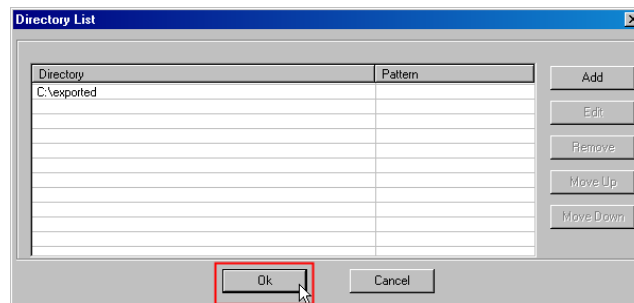
- f. Exported files can be segregated based on the file name the content of the message will be exported to. Enter the directory pattern that will be used for creating subdirectories for the exported files. Refer to [File Name Patterns](#) in section **VII.B** for details and examples on filename patterns. Leave it blank to save the content of the message in the selected directory.



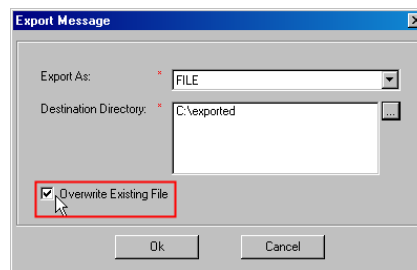
- g. Continue to add more directories if the content of the messages needs to be extracted into multiple directories. The sequence of the directories will be the same sequence that will be used when exporting the content of the messages. Click the **Move Up** or **Move Down** to move the selected directories up or down the list respectively.



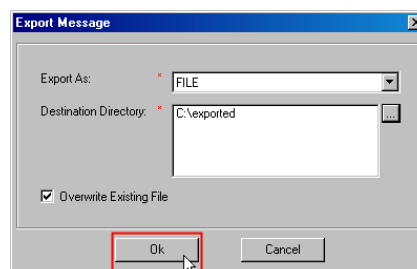
- h. Click **Ok** to confirm the list of directories that will be used to export the content of the messages.



- i. Overwrite the file if it exists by marking the **Overwrite Existing File** checkbox. When not selected, **.OLD.x** (where **x** is a sequence number) will be appended to the filename of the older file.



- j. Click **Ok** to proceed with the exporting.



The example above will export the selected message as **FILE** in the directory "**C:\exported**".

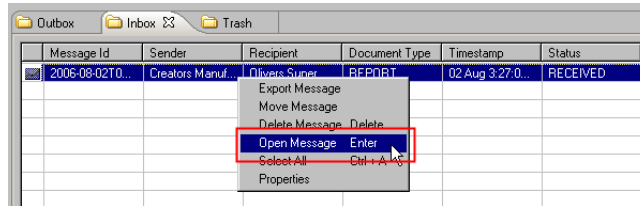


The status of the exported message will change to **EXPORTED**. This only happens when the message had a status of **RECEIVED** before it was exported. Exported messages will be marked as read regardless of its previous status.

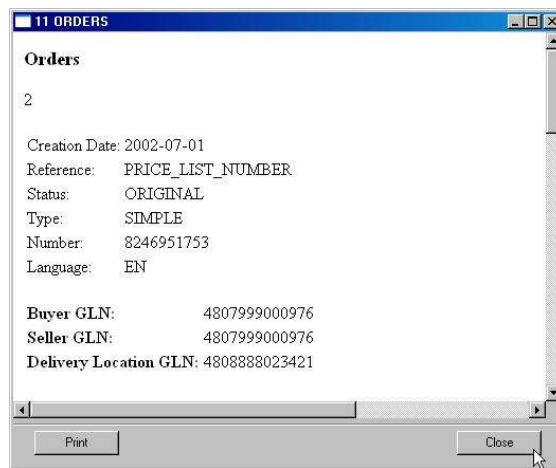


3. How to open a message

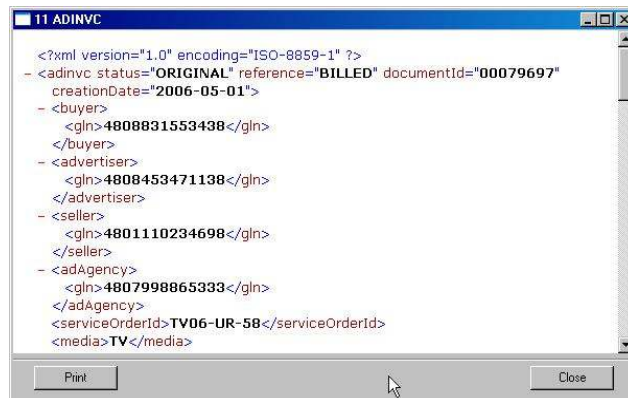
- a. Select the message that will be opened. Right click on them and click **Open Message** from the popup menu.



Opening an XML document message will open a new window transformed into its HTML form on the condition that a stylesheet for that XML document exists.



If none is found, the new window will contain the XML content of the message.

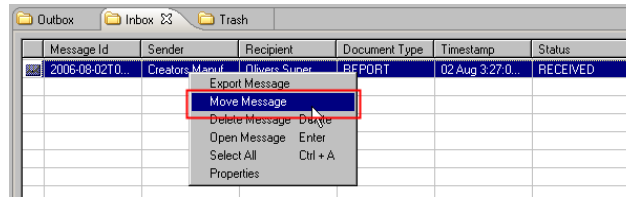


On the other hand, opening a non XML document message will open its content using the associated program that is set in the computer based on the file name of message.

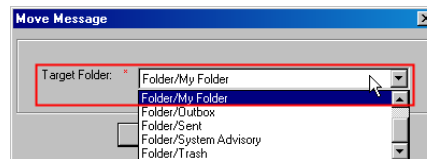
Messages that are opened will be marked as read.

4. How to move a message

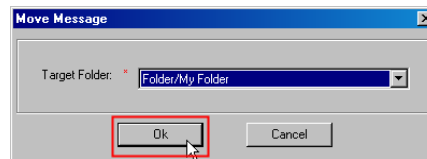
- a. Select the message that will be moved. Right click on them and then click **Move Message** from the popup menu.



- b. The Move Message dialog will open. Choose what folder the messages will be moved to.



- c. Click **Ok** to proceed with the moving of the selected messages.

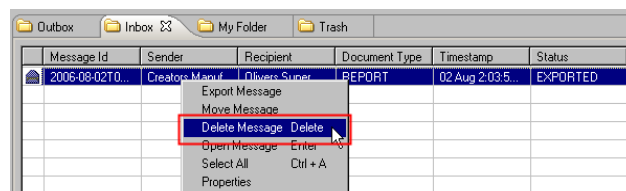


The example above will move the selected message to Folder/My Folder.

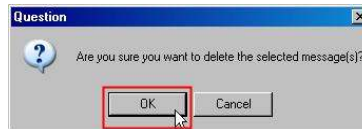


5. How to delete a message

- a. Select the message that will be deleted. Right click on them and then click **Delete Message** from the popup menu.



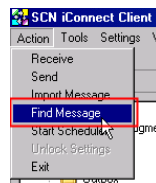
- b. Click **Ok** to confirm the deletion of the selected messages.



Deleted messages will be moved to the Trash folder. Deleting messages in the Trash folder will permanently delete the message.

6. How to find a message

- a. On the menu bar, click **Action – Find Message**

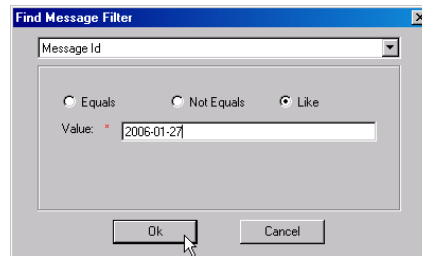


- b. The **Find Message** dialog will open.

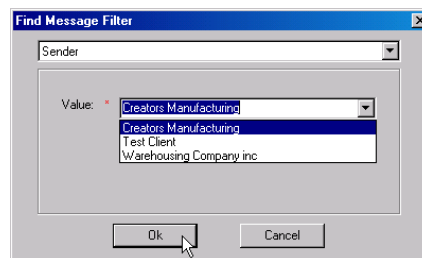


- c. Messages can be searched based on the details of the message (Refer to [Message Table Panel](#) in section **III.B** for the list and definitions of details of a message). Narrow down the search by defining filters for the details of the messages. Select the detail and set values for the filter. The filters can be any of the following:

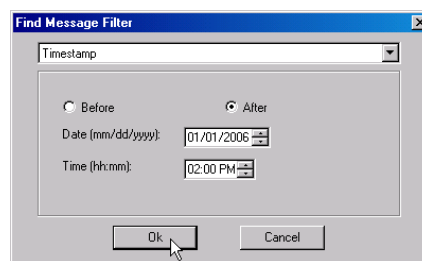
- **String match:** This filter is applicable for defining details for Message Id, Document Id, Reference Message Id, Document Type, and Filename. This filter matches the given value based on the chosen mode of comparison:
 - **Equal:** target has exactly the same as the given value
 - **Not Equal:** target is not the same as the given value
 - **Like:** target contains the given value



- **List match:** This filter is applicable for defining details for Folder, Sender, Recipient, and Status. This filter searches the selected value for the detail.



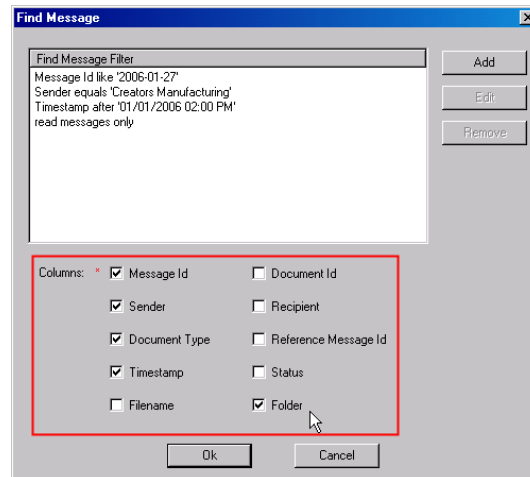
- **Timestamp match:** This filter limits the search to the timestamp within the given date and time. The filter may be set to search before or after the given date and time.



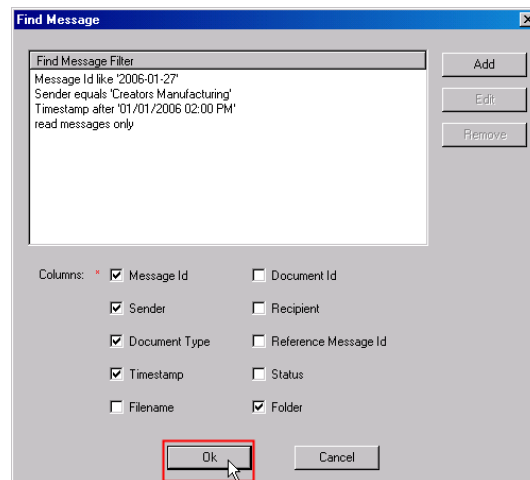
- **Read match:** This filter limits the search for either read or unread messages.



- d. After setting all the filters for the search, select the columns that will be displayed for the search results. At least one column should be selected.



- e. Click **Ok** to begin the search.



The example above will search for messages with the following details:

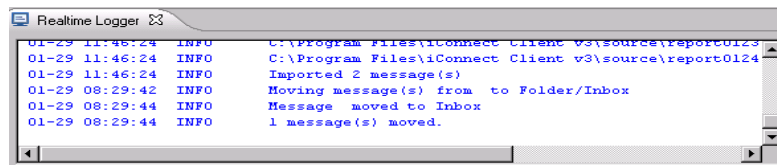
- Message Id must contain "2006-01-27".
- Sender must be "Creators Manufacturing".
- Timestamp must be after "January 01, 2006, 02:00 PM".
- Message must be marked "read".

- f. The messages that matched will be shown on a new Message Table panel.

Message Id	Sender	Document Type	Timestamp	Folder
2006-01-27T03:12:58...	Creators Manufac...	REPORT	27 Jan 3:12:58 AM	Folder/Inbox

C. Realtime Logger Panel

The Realtime Logger panel contains details and time of the events that are happening in the iConnect Client. A more comprehensive description of the events can be seen in the Log Viewer. Refer to [How to keep track of the activities of the iConnect](#) in section VI for more details about the logs and their content.



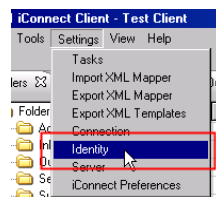
IV. How to set up the iConnect Client

A. How to set up the Identity

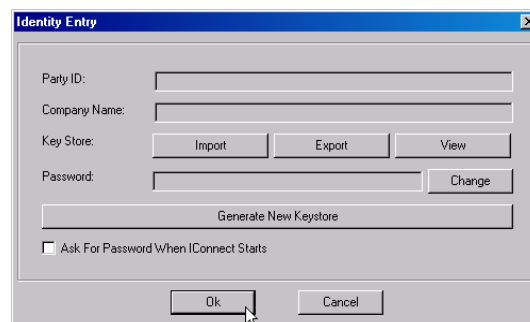
The iConnect Client uses a global location number or GLN to uniquely identity an entity. GLN can be obtained from GS1 Philippines (formerly known as Philippine Article Numbering Council or PANC).

The iConnect Client also uses a public key infrastructure to secure the content of the messages through encryption. The keys are registered to the user's GLN to make sure that only the owner of the GLN can use these keys. All of this information is stored in a Keystore file.

The identity settings can be configured from the **Identity Entry** dialog. This can be accessed by clicking [Settings – Identity](#) from the menu bar.



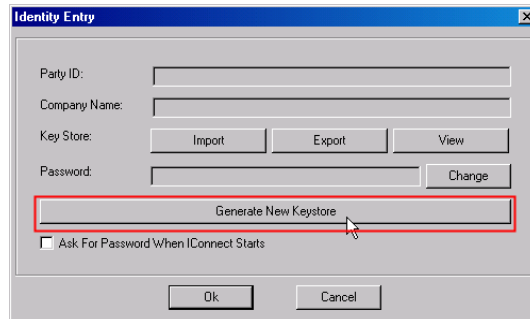
This is the **Identity Entry** dialog.



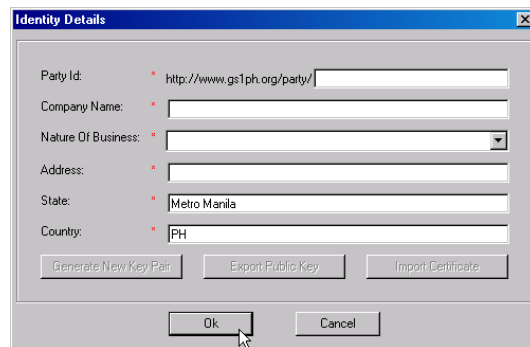
1. How to generate a new Keystore

The Keystore file consists of the details of the identity, a key pair (private key and public key), and a public key certificate. To create a Keystore, a private and public key must first be generated.

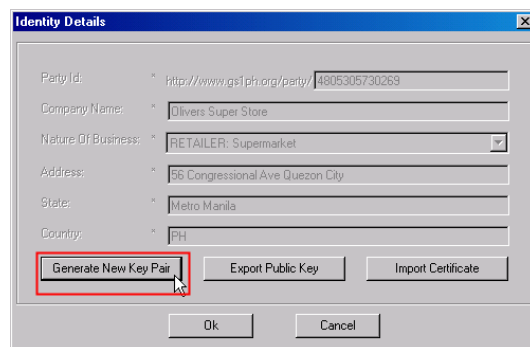
- a. On the Identity Entry dialog, click the **Generate New Keystore** button.



- b. The **Identity Details** dialog will open.



All fields will appear disabled if a key pair has already been generated. Click the **Generate New Key Pair** button to change the previously created key pair with a new one.

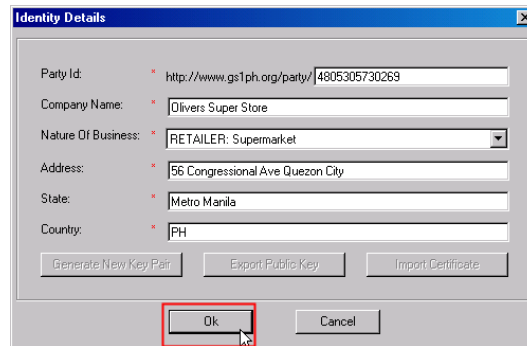


Enter the following details for the new identity:

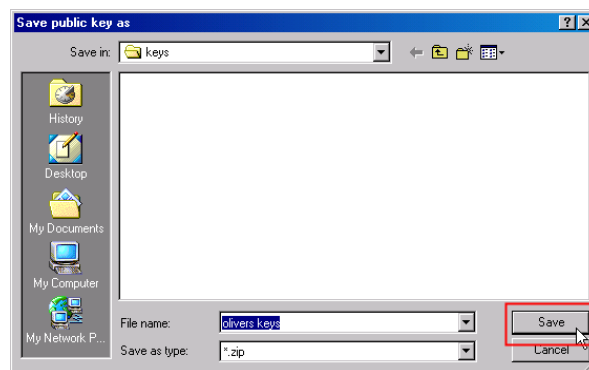
- **Party Id:** Enter the GLN that will be used for the identity.
- **Company Name:** Enter the name of the organization who owns the GLN.

- **Nature of Business:** Choose from the drop down list to classify the type of organization.
- **Address:** Enter the full address of the organization.
- **State:** Enter the state where the organization is located.
- **Country:** Enter the two letter code for the country the organization is located.

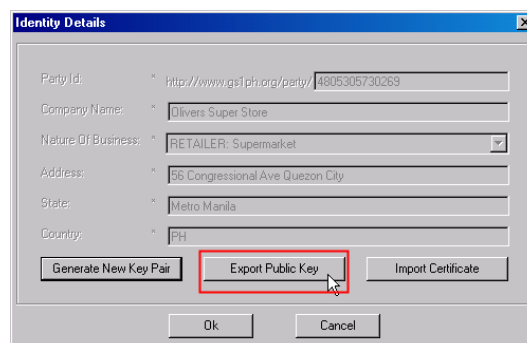
- c. Click **Ok** to generate the new key pair using the provided information.



- d. When the file dialog opens, select the location and filename to save the public key and the information of the newly generated key pair. This file will have a .zip file extension. Click the **Save** button to save the file with the chosen location and filename.



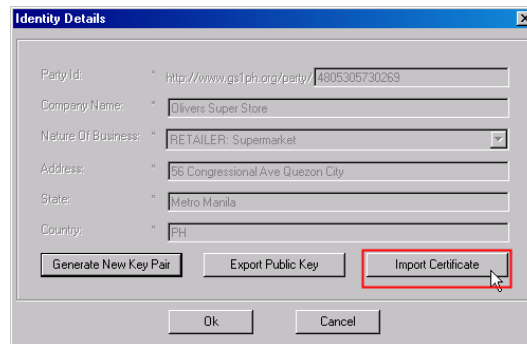
This file can be repeatedly exported by clicking on the **Export Public Key** button in the **Identity Details** dialog.



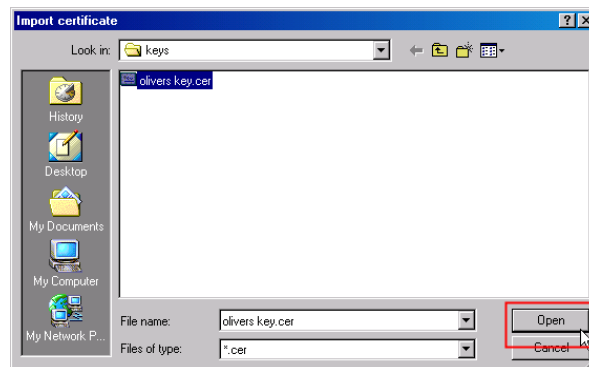
- e. To register the keys to the server, submit the file containing the public key and the information of the newly generated key pair to iConnect Technical support. Then, a

public key certificate will be sent back after the public key has been registered. Save it into the computer.

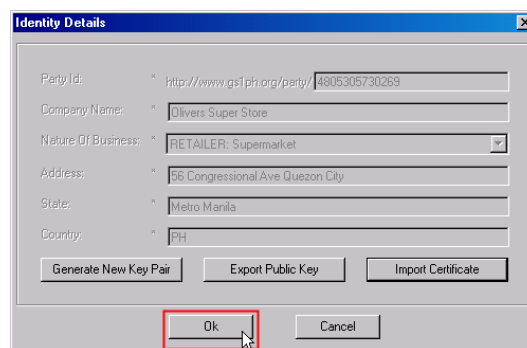
- f. In the **Identity Entry** dialog, click the **Generate new Keystore** button. This will open the **Identity Details** dialog. Click the **Import Certificate** button.



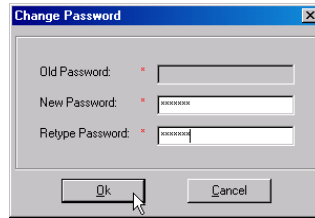
- g. A file dialog will open. Locate and select the public key certificate that was sent by the iConnect Technical Support. This file has a **.cer** file extension. Click the **Open** button to import the selected public key certificate file.



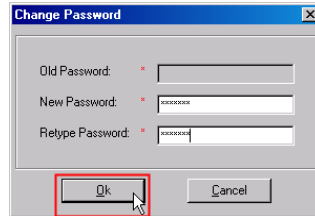
- h. Click the **Ok** button in the Identity Details dialog to create the Keystore.



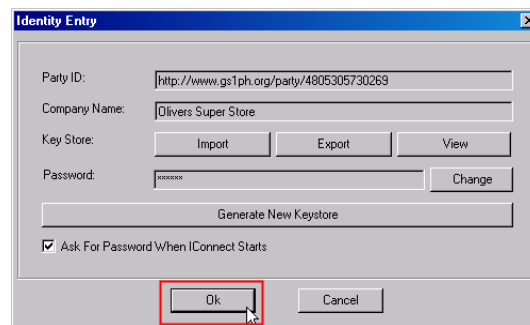
- i. After verifying the imported certificate, a password dialog will open. Enter the password that will be used to secure the Keystore. The password must be at least six characters.



- j. Click the **Ok** button for the password dialog to continue.



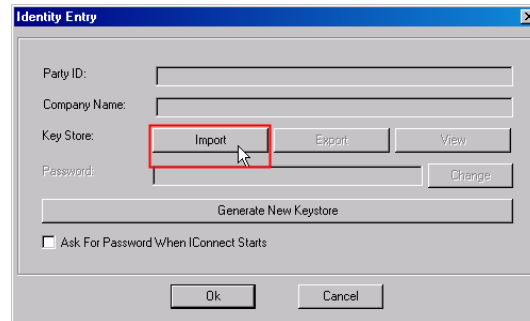
- k. Click the **Ok** button of the **Identity Entry** dialog to save the newly created Keystore.



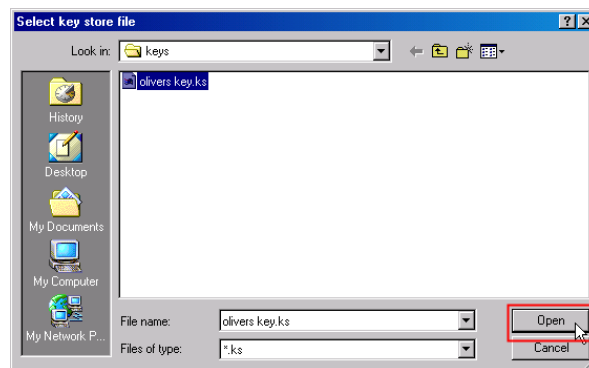
2. How to import an existing Keystore

There is no need to create a new Keystore if one already exists. An existing Keystore file can be imported into the iConnect Client program to use the keys and information that it has. When imported, the iConnect Client will create its own copy of the Keystore. This means that any changes made to the original file will not affect the copy that the iConnect Client has made. Any changes that the iConnect Client made to its copy of the Keystore will also not affect the imported Keystore file.

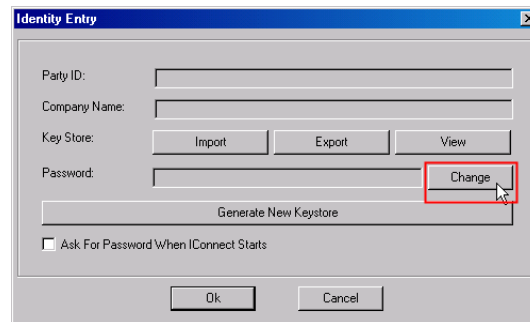
- a. On the **Identity Entry** dialog, click the **Import** button for the Keystore field.



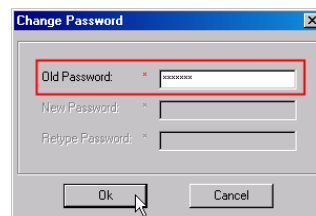
- b. A file dialog will open. Locate and select the Keystore file that will be imported. A Keystore file has a **.ks** file extension. Click the **Open** button to import the selected Keystore file.



- c. On the **Identity Entry** dialog, click the **Change** button for the Password field.



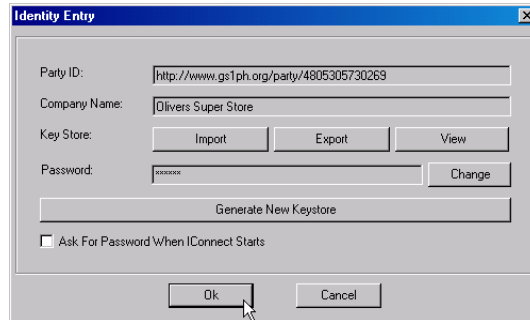
- d. A password dialog will open. Enter the password for the imported Keystore file.



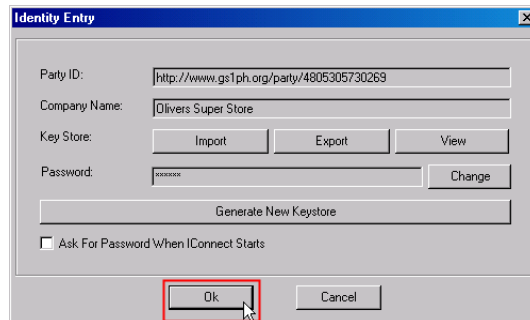
- e. Click the **Ok** button to continue.



- f. The importing of the Keystore file is successful if the Party Id and Company Name fields of the **Identity Entry** dialog have changed into the information that is contained in the imported Keystore file.



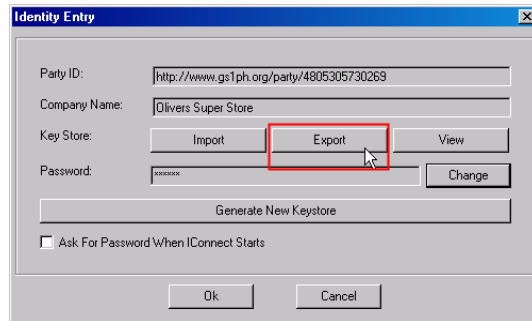
- g. Click the **Ok** button to save the changes.



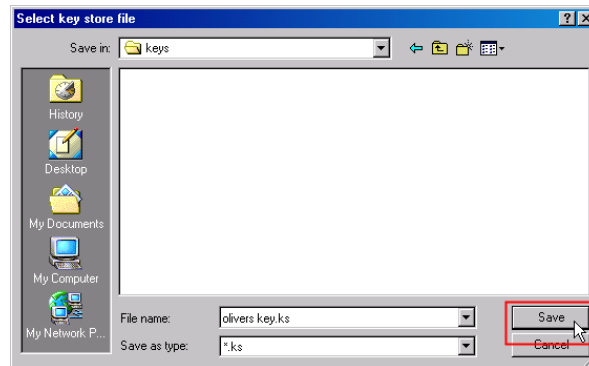
3. How to export an existing Keystore

It is important to keep a back up of the Keystore for security reasons and to prevent the hassle of creating a new Keystore.

- a. On the **Identity Entry** dialog, click the **Export** button for the Keystore field.



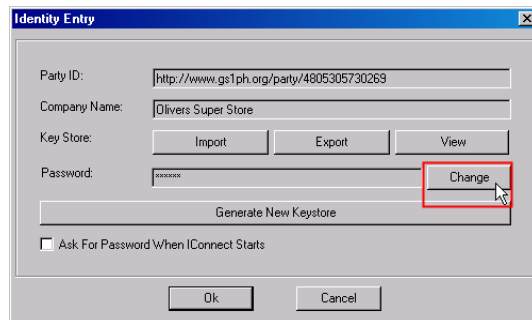
- b. A file dialog will open. Select the location and name of the file that will be used to save the Keystore. Click the **Save** button to export the Keystore into the selected file.



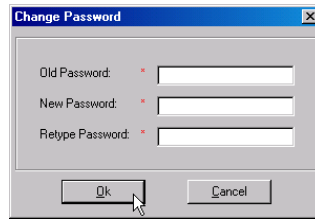
4. How to change the Keystore Password

The Keystore password may be changed if the user sees the need for it. However, this change will only take effect on the Keystore that is imported in the iConnect Client. This change will not affect the other copies of the Keystore that was previously made.

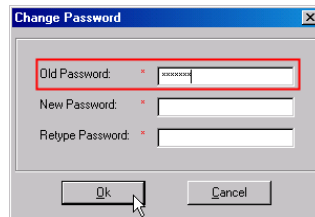
- a. On the **Identity Entry** dialog, click the **Change** button for the Password field.



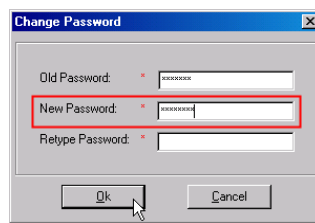
- b. The **Change Password** dialog will open.



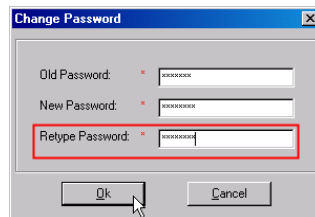
- c. On the Old Password field, enter the password of the existing Keystore.



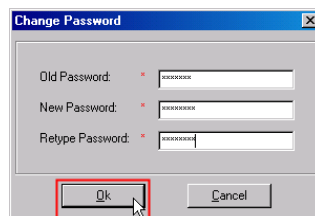
- d. On the New Password field, enter the new password that will be used for the Keystore. The new password should be at least six characters.



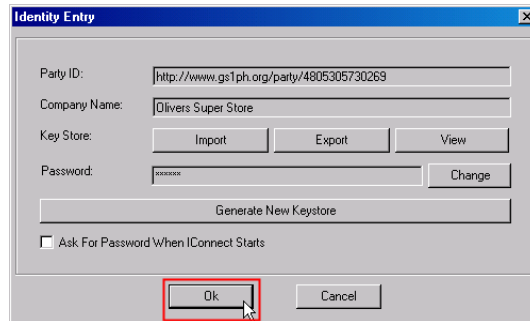
- e. To confirm, enter the new password again that will be used for the Keystore on the Retype Password field.



- f. Click the **Ok** button of the **Change Password** dialog to continue.

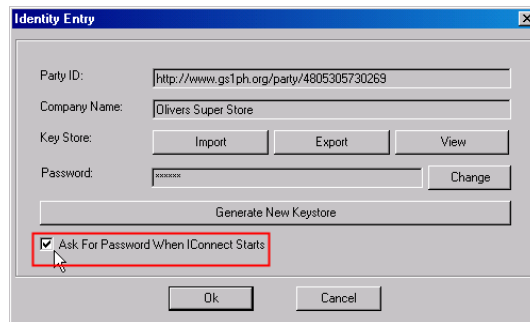


- g. Click the **Ok** button of the **Identity Entry** dialog to save the changes.

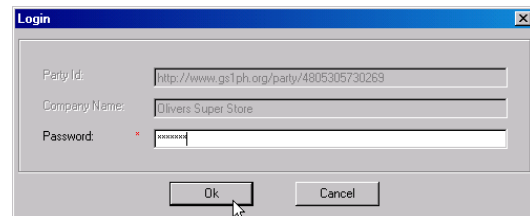


5. How to enable the iConnect Client Password Protection

To add security to the iConnect Client, a password may be prompted before the application will open. This password is the same as the password used for the Keystore. Select the **Ask For Password When IConnect Starts** checkbox in the **Identity Entry** dialog to enable this feature.

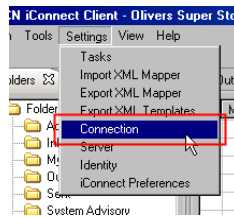


When this is enabled, this dialog will open while the iConnect Client is initiating.

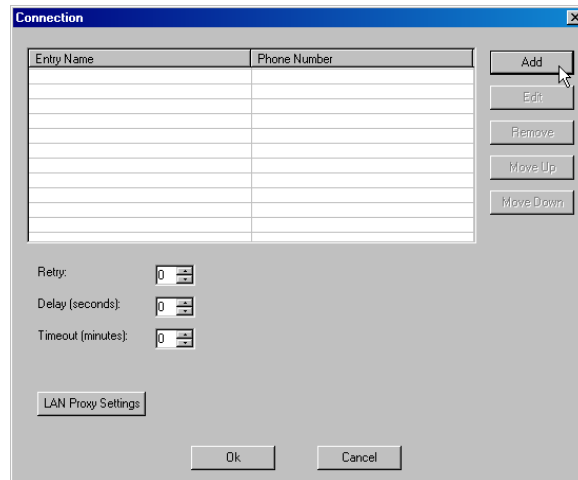


B. How to set up the Connection

The iConnect Client requires an internet connection to be able to send and receive messages from the server. A dial-up connection may be started if the iConnect Client did not detect an internet connection from the computer. Click **Settings – Connection** from the menu bar to open the **Connection** dialog.



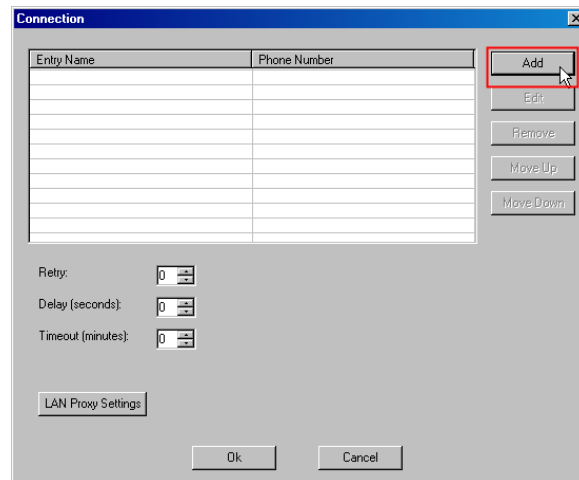
This is the **Connection** dialog.



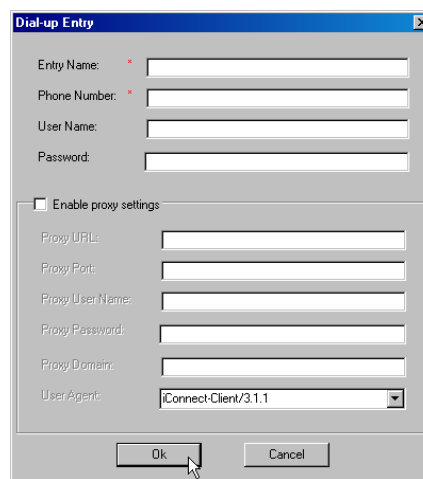
1. How to set up the Dial-up Connection

Dial-up accounts can be set up in the iConnect Client. These accounts will be used whenever the iConnect requires an internet connection. The program will automatically initiate the dial-up connection and disconnect it when the program is finished using the internet connection.

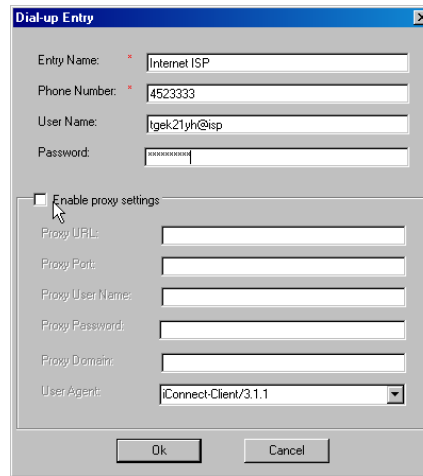
- a. To add a dial-up account, click the **Add** button in the **Connection** dialog.



- b. A **Dial-up Entry** dialog will open.

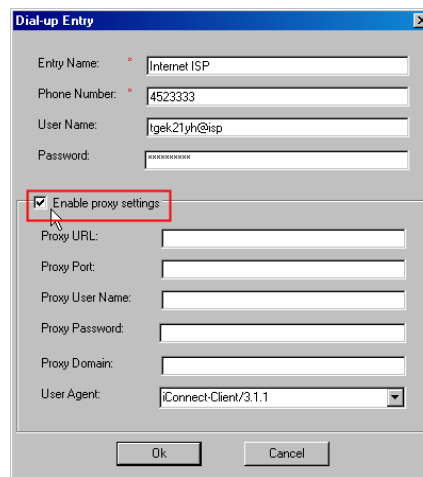


- c. Enter the following details of the dial-up account.
- **Entry Name:** Enter a name for this dial-up account.
 - **Phone Number:** Enter the phone number of the dial-up account
 - **User Name:** Enter the user name of the dial-up account.
 - **Password:** Enter the password of the dial-up account.



The screenshot shows the 'Dial-up Entry' dialog box. It has a title bar with a close button. The main area contains several input fields: 'Entry Name' (Internet ISP), 'Phone Number' (4523333), 'User Name' (tgek21yh@isp), and 'Password' (masked with asterisks). Below these is a section for proxy settings, which is currently collapsed. The 'Enable proxy settings' checkbox is unchecked. The proxy fields include 'Proxy URL', 'Proxy Port', 'Proxy User Name', 'Proxy Password', 'Proxy Domain', and 'User Agent' (set to iConnect-Client/3.1.1). At the bottom are 'Ok' and 'Cancel' buttons.

- d. If the dial-up connection requires connecting through a proxy, select the **Enable Proxy Settings** checkbox to configure the required proxy connection.

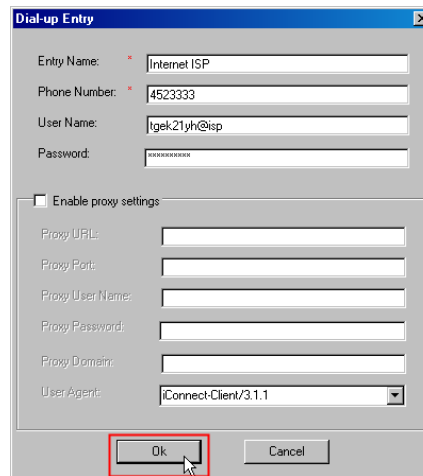


This screenshot is identical to the previous one, but the 'Enable proxy settings' checkbox is now checked and highlighted with a red rectangular box. A mouse cursor is pointing at the checkbox.

Enter the following details of the proxy connection:

- **Proxy URL:** Enter the IP Address or the URL of the proxy server.
- **Proxy Port:** Enter the port of the proxy server.
- **Proxy User Name:** Enter the user name of the account that will be authenticated by the proxy server.
- **Proxy Password:** Enter the password of the account.
- **Proxy Domain:** Enter the domain of the proxy server.
- **User Agent:** Enter the name that will be used to identity the iConnect Client application to the proxy server

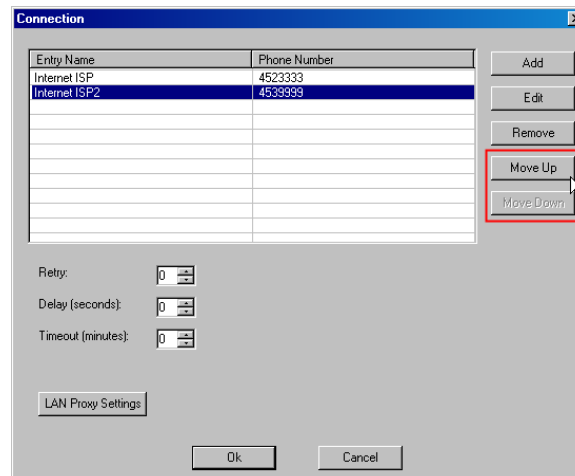
- e. Click the **Ok** button to save the details of the dial-up account.



The 'Dial-up Entry' dialog box contains the following fields and controls:

- Entry Name: * Internet ISP
- Phone Number: * 4523333
- User Name: lgek21yh@isp
- Password: *
- ☐ Enable proxy settings
- Proxy URL: *
- Proxy Port: *
- Proxy User Name: *
- Proxy Password: *
- Proxy Domain: *
- User Agent: iConnect-Client/3.1.1
- Buttons: Ok, Cancel

- f. The sequence of the created dial-up accounts will be followed when connecting through a dial-up connection. The order may be changed by clicking the **Move Up** or **Move Down** buttons to move the order of the selected dial-up account.



The 'Connection' dialog box contains the following elements:

Entry Name	Phone Number
Internet ISP	4523333
Internet ISP2	4533333

Buttons: Add, Edit, Remove, Move Up, Move Down

Retry: 0

Delay (seconds): 0

Timeout (minutes): 0

LAN Proxy Settings

Buttons: Ok, Cancel

- g. The value on the Retry field is the number of seconds between retries.

The screenshot shows the 'Connection' dialog box. It has a table with two columns: 'Entry Name' and 'Phone Number'. The table contains two rows: 'Internet ISP' with phone number '4523333' and 'Internet ISP2' with phone number '4539999'. To the right of the table are buttons: 'Add', 'Edit', 'Remove', 'Move Up', and 'Move Down'. Below the table, there are three spinners: 'Retry' (set to 03), 'Delay (seconds)' (set to 05), and 'Timeout (minutes)' (set to 05). The 'Retry' spinner is highlighted with a red box. At the bottom, there is a 'LAN Proxy Settings' button and 'Ok' and 'Cancel' buttons.

Entry Name	Phone Number
Internet ISP	4523333
Internet ISP2	4539999

Retry: 03
Delay (seconds): 05
Timeout (minutes): 05

LAN Proxy Settings

Ok Cancel

- h. The value on the Delay field is the number of times the iConnect Client will try to connect to a dial-up account when it has encountered an error during connecting.

This screenshot is identical to the previous one, showing the 'Connection' dialog box. In this instance, the 'Delay (seconds)' spinner, which is set to 05, is highlighted with a red box. The 'Retry' spinner is set to 03 and the 'Timeout (minutes)' spinner is set to 05.

Entry Name	Phone Number
Internet ISP	4523333
Internet ISP2	4539999

Retry: 03
Delay (seconds): 05
Timeout (minutes): 05

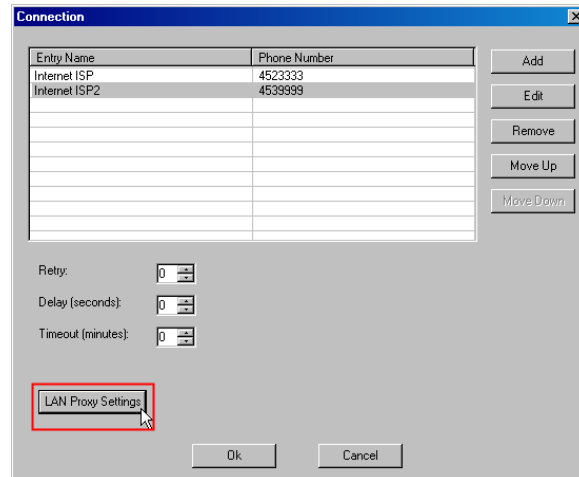
LAN Proxy Settings

Ok Cancel

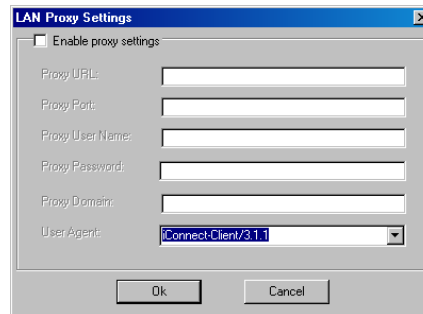
2. How to set up the Local Area Network (LAN) Proxy Connection

Some network passes through a proxy server to be able to connect to the internet.

- a. Click the **LAN Proxy Settings** button on the **Connection** dialog to configure the required proxy connection.

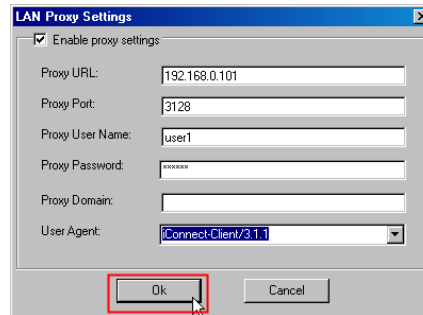


- b. **The LAN Proxy Settings** dialog will open.



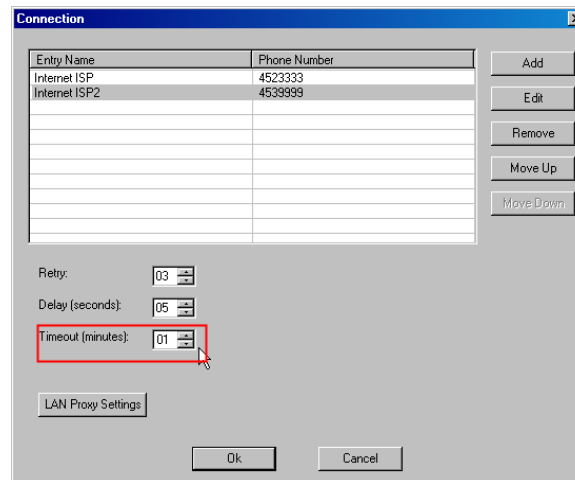
- c. Enter the following details of the proxy connection:
- **Proxy URL:** Enter the IP Address or the URL of the proxy server.
 - **Proxy Port:** Enter the port of the proxy server.
 - **Proxy User Name:** Enter the user name of the account that will be authenticated by the proxy server.
 - **Proxy Password:** Enter the password of the account.
 - **Proxy Domain:** Enter the domain of the proxy server.
 - **User Agent:** Enter the name that will be used to identity the iConnect Client application to the proxy server

- d. Click the **Ok** button to save the details of the proxy connection.



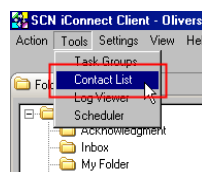
3. How to set the Connection Timeout

The connection timeout is the amount of time before the iConnect Client disconnects from the server after it has been idle or waiting for a response from the server. The connection timeout can be set on the Timeout field in minutes.

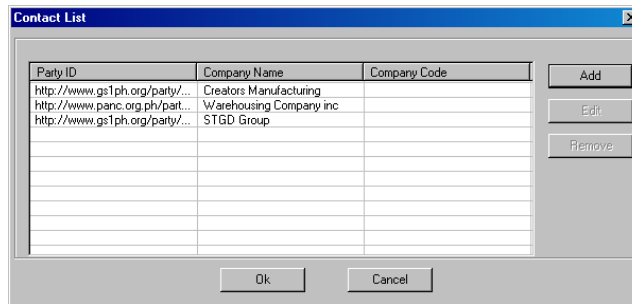


C. How to set up the Contact List

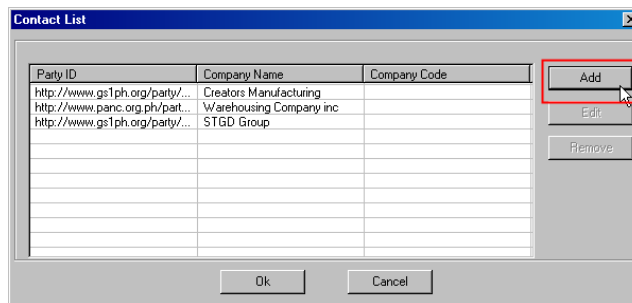
The Contact List in the iConnect Client contains a list of entities that exchanges messages with the user. The iConnect Client uses this information to display the names of the entity instead of their party Ids. The Contact List may also contain lists of internal codes for the entity to easily identify the recipient of a file when importing non-XML documents. Click **Tools – Contact List** from the menu bar to open the **Contact List** dialog.



This is the Contact List dialog.



1. To add a new contact to the list, click the **Add** button in the **Contact List** dialog.



2. A **Contact Entry** dialog will open.

The screenshot shows the 'Contact Entry' dialog box. It contains a series of labeled text input fields for the following information: Party ID, Company Name, Company Code, Business Type, Address, City/Town, Province, Country, Telephone Number, Fax Number, Mobile Number, Email Address, Website, and Contact Person. Each field has a small red asterisk to its left. At the bottom of the dialog are 'Ok' and 'Cancel' buttons.

Enter the following details for the new contact. A contact must at least have a Party Id and Company Name defined in the **Contact Entry** dialog.

- **Party Id:** Enter the complete party Id of the new contact. A party Id is composed of the party Id prefix (usually <http://www.gs1ph.org/party/>) and the GLN of the new contact.
- **Company Name:** Enter the name of the organization of the new contact.
- **Company Code:** Enter the internal codes associated to the new contact if there are any. Multiple codes can be placed separated by a comma.
- **Business Type:** Enter the type of organization of the new contact.
- **Address:** Enter the address of the new contact.
- **City/Town:** Enter the city or town of the new contact.
- **Province:** Enter the province of the new contact.
- **Country:** Enter the country of the new contact.
- **Telephone Number:** Enter the telephone number of the new contact.
- **Fax Number:** Enter the fax number of the new contact.
- **Mobile Number:** Enter the mobile number of the new contact.
- **Email Address:** Enter the email address of the new contact.
- **Website:** Enter the website of the new contact.
- **Contact Person:** Enter the contact person of the new contact.

3. Click the **Ok** button to save the new contact.

Party ID:

Company Name:

Company Code:

Business Type:

Address:

City/Town:

Province:

Country:

Telephone Number:

Fax Number:

Mobile Number:

Email Address:

Website:

Contact Person:

4. Click the **Ok** button to save the update the contact list.

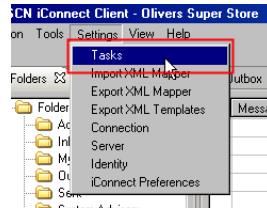
Party ID	Company Name	Company Code
http://www.gs1ph.org/party/...	Creators Manufacturing	
http://www.panc.org.ph/pait...	Warehousing Company inc	
http://www.gs1ph.org/party/...	STGD Group	
http://www.gs1ph.org/party/...	Company A	OP023, 003

D. How to set up a Task

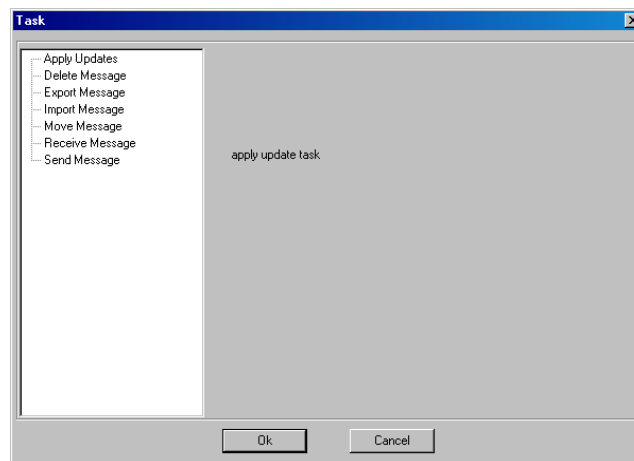
A task is an action that is preconfigured to create a more specific type of action. A task can be an **Apply Updates Task**, **Delete Message Task**, **Export Message Task**, **Import Message Task**, **Move Message Task**, **Receive Message Task**, or a **Send Message Task**. Other kinds of tasks may be available depending on the components that are installed in the iConnect Client.

Tasks can be executed by adding it into a Task Group. Refer to [How to set up a Task Group](#) in section **IV.E** for more details.

Click **Settings – Task** from the menu bar to open the **Task** dialog.



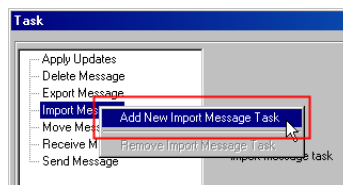
This is the **Task** dialog. All available tasks are listed on the left side of the dialog.



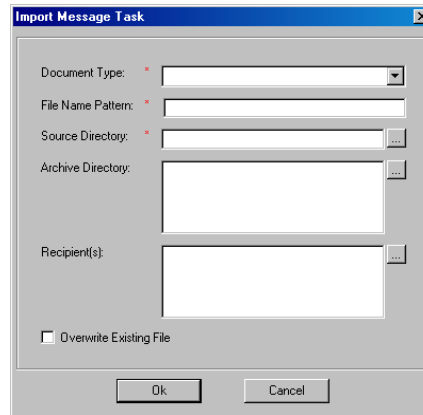
1. How to set up Task for Import Message

Import Message Task is a task that creates messages from the files that it will import using the parameters that were set for the task.

- Right click on **Import Message** from the **Task** dialog and select **Add New Import Task** from the popup menu.

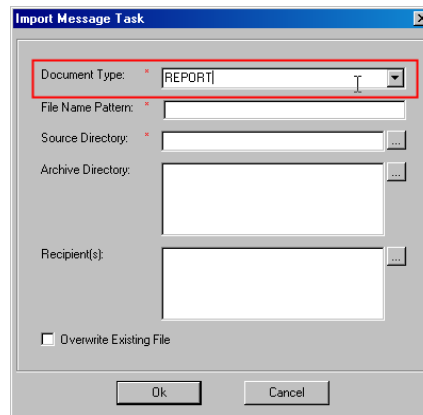


- b. An **Import Message Task** dialog will open.



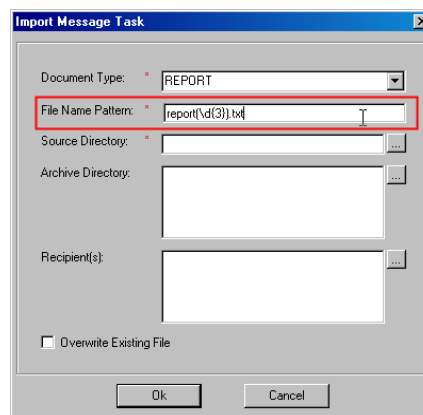
The screenshot shows the 'Import Message Task' dialog box. It has a title bar with a close button. The dialog contains several fields: 'Document Type' (a dropdown menu), 'File Name Pattern' (a text box), 'Source Directory' (a text box with a browse button), 'Archive Directory' (a text box with a browse button), and 'Recipient(s)' (a text box with a browse button). There is an 'Overwrite Existing File' checkbox at the bottom left. At the bottom right are 'Ok' and 'Cancel' buttons.

- c. Enter the type of message to be created in the **Document Type** field. Installed XML document types can be selected from the list by clicking the ▾ button.




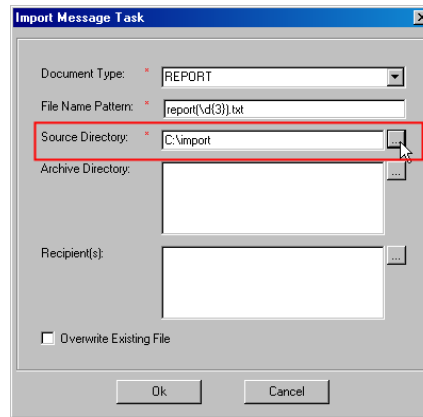
This screenshot shows the 'Import Message Task' dialog box with the 'Document Type' dropdown menu open and 'REPORT' selected. A red rectangle highlights the 'Document Type' field and its dropdown arrow. The other fields and buttons remain the same as in the previous screenshot.


- d. Enter the pattern of the file name that will be accepted for this type of message on the File Name Pattern field. Refer to [File Name Patterns](#) in section **VII.B** for details and examples on file name patterns.

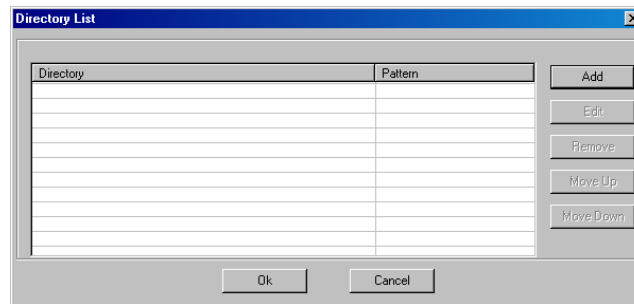


This screenshot shows the 'Import Message Task' dialog box with 'REPORT' selected in the 'Document Type' field. The 'File Name Pattern' text box now contains the text 'report\vd(3).txt'. A red rectangle highlights the 'File Name Pattern' field. The other fields and buttons remain the same.

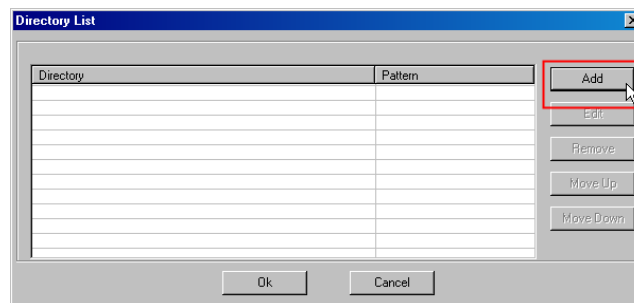
- e. Choose the location of the files to be imported on the **Source Directory** field by clicking on the  button.




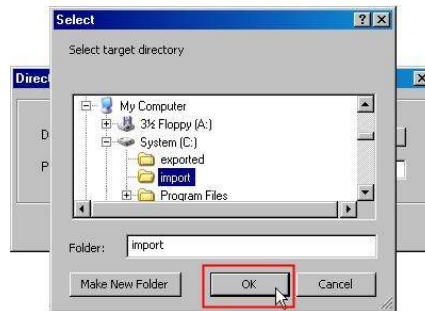
- f. When a file has been imported, it will be moved to the directories listed on the Archive Directory field. Set the directories to save imported files. Click on the  button to open the **Directory List** dialog.



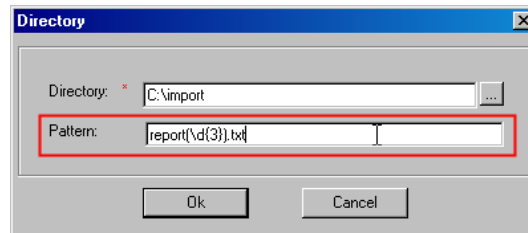
- g. On the **Directory List** dialog, click the **Add** button.



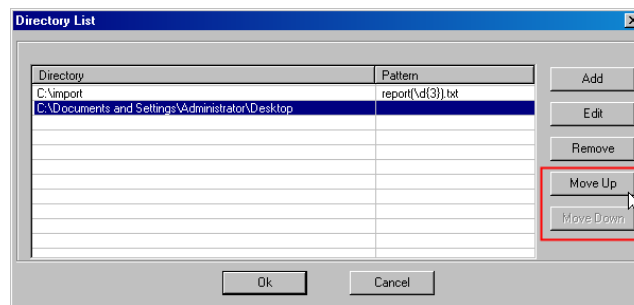
- h. The **Directory** dialog will open. Click on the  button and select the directory from the list. Click **Ok** to confirm the selected directory.



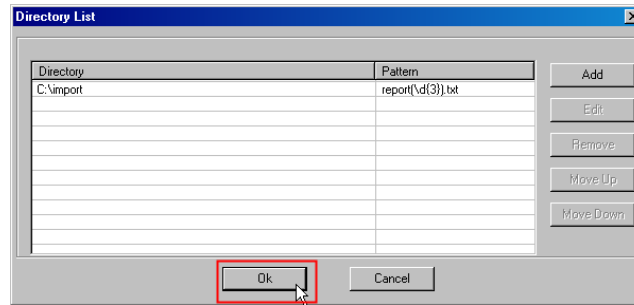
- i. Imported files can be segregated based on their file name. Enter the directory pattern that will be used for creating subdirectories for the imported files. Refer to [File Name Patterns](#) in section **VII.B** for details and examples on filename patterns. Leave it blank to save the file in the selected directory.




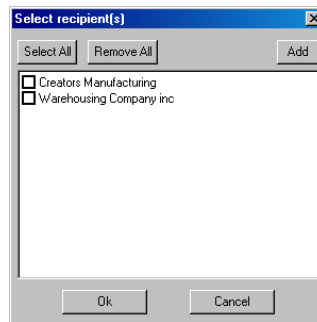
- j. Continue to add more directories if the imported files need to be moved into multiple directories. The sequence of the directories will be the same sequence that will be used when moving imported file. Click the **Move Up** or **Move Down** to move the selected directories up or down the list respectively.



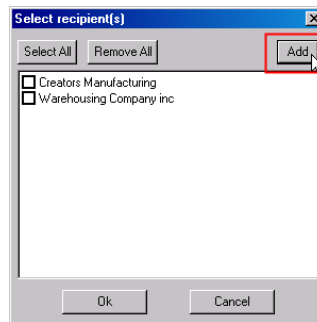
- k. Click **Ok** to confirm the list of directories that will be used to move the imported file.



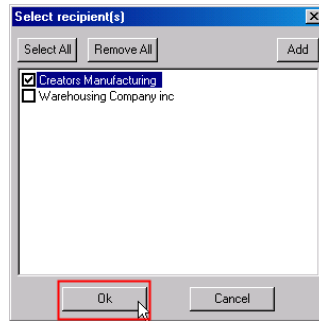
- l. Set the recipients for this type of message. Take note that an XML document message already has a defined recipient in its content. Click on the  button to open the list of recipients.



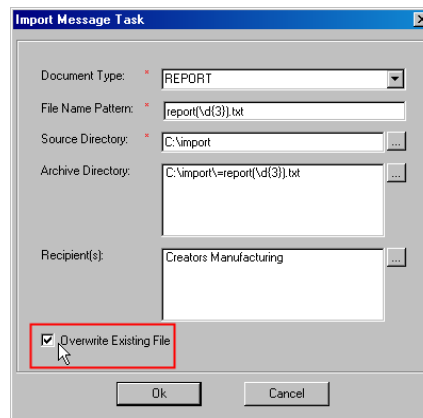
Select the recipients for this type of message. New contacts can be added by clicking on the **Add** button. Refer to [How to set up the Contact List](#) in section **IV.C** for details on how to add new contact details.



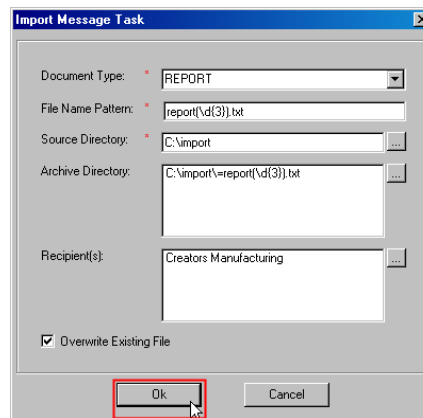
- m. Click **Ok** to confirm on the selected recipients.



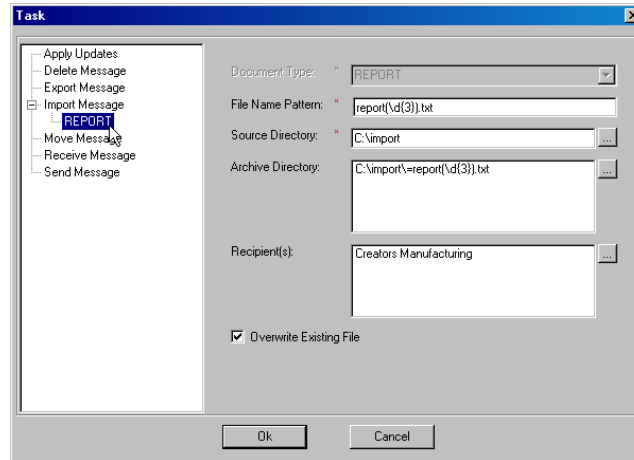
- n. Overwrite the file if it exists by selecting the **Overwrite Existing File** checkbox. When not selected, **.OLD.x** (where **x** is a sequence number) will be appended to the filename of the older file.



- o. Click the **Ok** button to save the details for the new Import Message Task.



- p. The new Import Message Task will be listed in the lists of tasks under Import Message. The details of the created task can be viewed and edited by selecting it.



This is what will happen when this Import Message Task is executed:

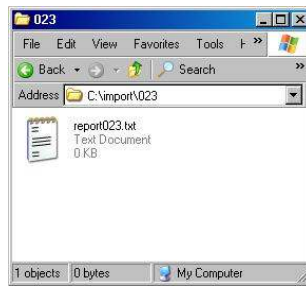
The Import Message – REPORT will create messages of type **“REPORT”** containing files found in **“C:\import”** directory with a file name pattern of **“report”** (case sensitive) followed by three digits and file extension of **“.txt”** (case sensitive).



The three digits in the file name will determine the recipient of the message. The three digits will be matched to the lists of company codes defined in the Contact List. The same message will also be created for **“Creators Manufacturing”**.



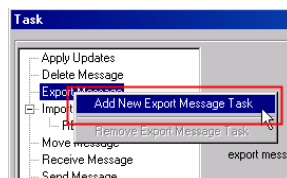
All imported files will be moved to the directory "**C:\import\xxx**". **xxx** is the three digits found in the file name of the imported file. The file will be overwritten if the file name already exists.



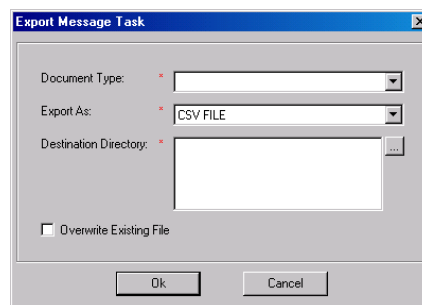
2. How to set up Task for Export Message

Export Message is a task that exports the content of a message into a file using the parameters set for this task. This task only applies to message found in the **Inbox** folder of the iConnect Client with **RECEIVED** status.

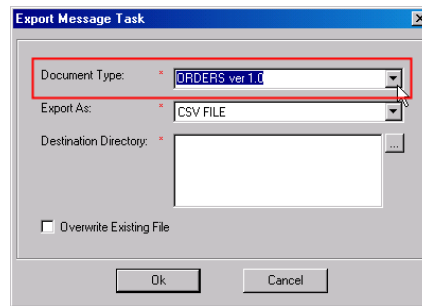
- a. Right click on **Export Message** from the **Task** dialog and select **Add New Export Task** from the popup menu.



- b. An **Export Message Task** dialog will open.

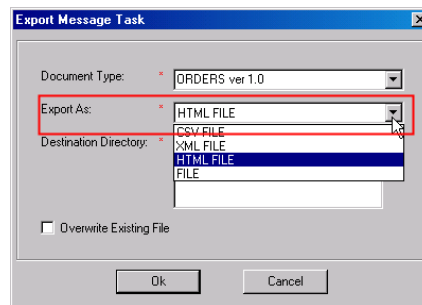


- c. Enter the type of message to be exported on the **Document Type** field. Installed XML document types can be selected from the list by clicking the ▼ button.




- d. Select the type of file where the content of the messages will be exported to. These types are as follows:

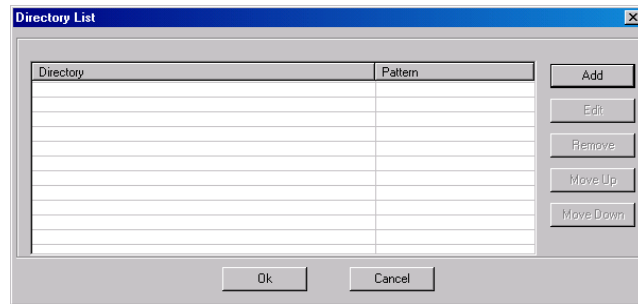
- **CSV FILE**: export content of the XML document message as a comma separated value file
- **XML FILE**: export content of the XML document message as an extensible markup language file
- **HTML FILE**: export content of the XML document message using a stylesheet
- **FILE**: export the content of the message as is.



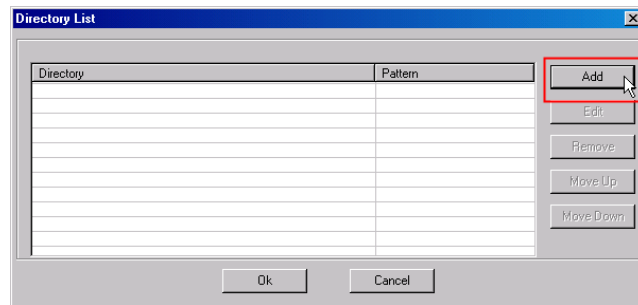
The iConnect Client will automatically export the content of the message as **FILE** for non XML documents.

Content of the messages exported as **FILE** will be saved using its original file name. On the other hand, contents of the messages exported as **CSV**, **XML**, or **HTML FILE** will be saved using a generated file name based on the details of the message. Refer to [How to set up Export XML File Name Templates](#) on section **IV.F.3** for details on generating file names.

- e. Set the directory to save the exported content. Click on the  button to open the **Directory List** dialog.



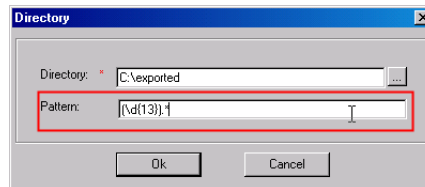
- f. On the **Directory List** dialog, click the **Add** button.



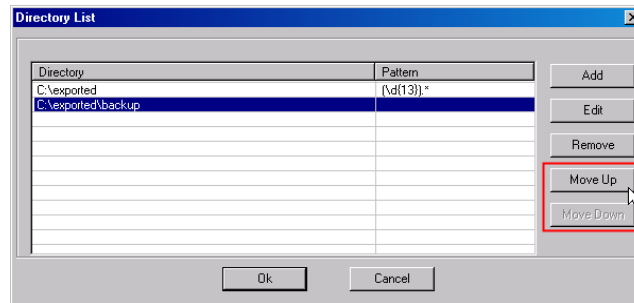
- g. The **Directory** dialog will open. Click on the (screenshot of browse button) and select the directory from the list. Click **Ok** to confirm the selected directory.



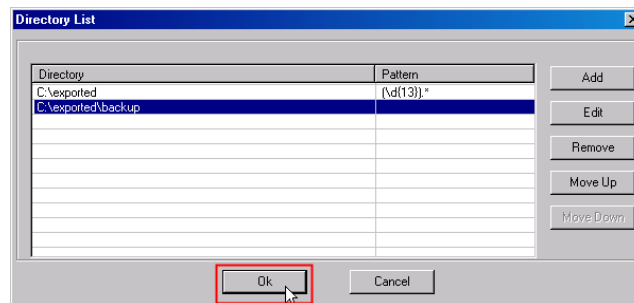
- h. Exported files can be segregated based on the file name the content of the message will be exported to. Enter the directory pattern that will be used for creating subdirectories for the exported files. Refer to **File Name Patterns** in section **VII.B** for details and examples on filename patterns. Leave it blank to save the content of the message in the selected directory.



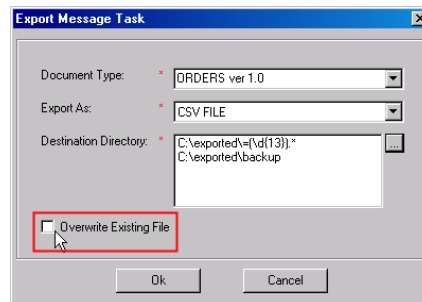
- i. Continue to add more directories if the content of the messages needs to be extracted into multiple directories. The sequence of the directories will be the same sequence that will be used when exporting the content of the messages. Click the **Move Up** or **Move Down** to move the selected directories up or down the list respectively.



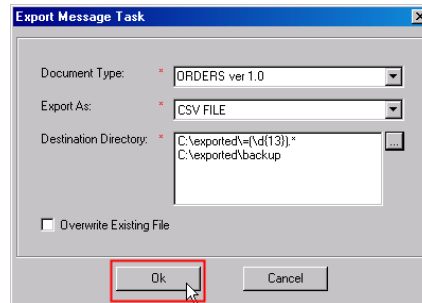
- j. Click **Ok** to confirm the list of directories that will be used to export the content of the messages.



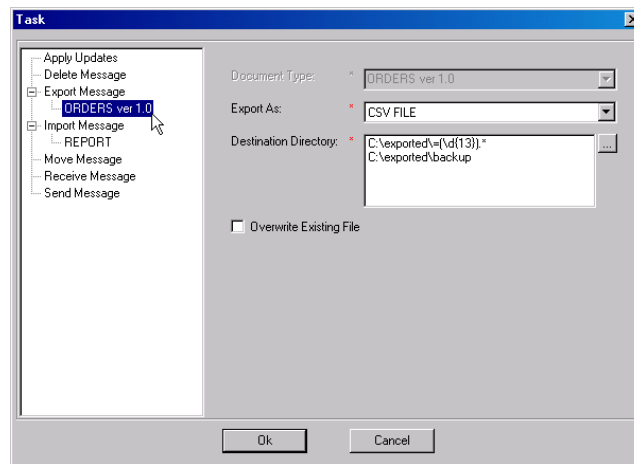
- k. Overwrite the file if it exists by selecting the **Overwrite Existing File** checkbox. When not selected, **.OLD.x** (where **x** is a sequence number) will be appended to the filename of the older file.



- l. Click the **Ok** button to save the details of the new Export Message Task.



- m. The new Export Message Task will be listed in the lists of tasks under Export Message. The details of the created task can be viewed and edited by selecting it.

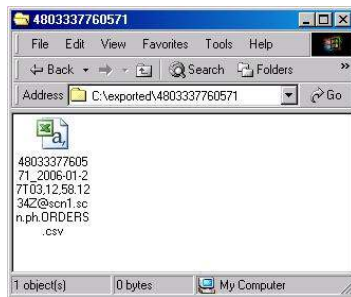


This is what will happen when this Export Message Task is executed:

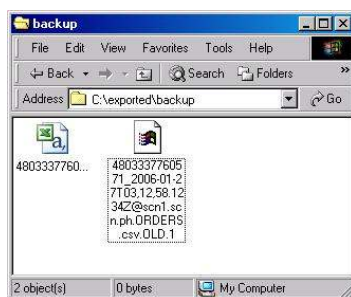
The Export Message – ORDERS ver 1.0 will export the content of the messages of type **"ORDERS version 1.0" (ORDERS/XML/1.0.x)** found in the iConnect Client folder **"Folder/Inbox"** with a status of **"RECEIVED"** as **"CSV"** files.

Outbox		Inbox				
Message Id	Sender	Recipient	Document Type	Timestamp	Status	
2006-08-02T0...	Creators Manuf...	Olivers Super ...	ORDERS	02 Aug 2:03:5...	RECEIVED	

The files will be saved in two directories. First, in "**C:\exported\xxxxxxxxxxxxx**" directory where **xxxxxxxxxxxxx** is the thirteen digits found at the beginning of the file name of the file.



And second, in "**C:\exported\backup**". Old files will be renamed if the file name already exists.



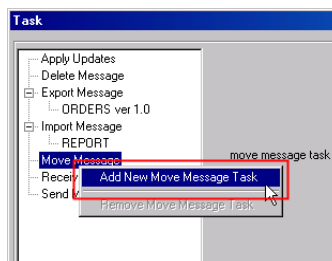
Status of exported messages will change from "**RECEIVED**" to "**EXPORTED**". Exported messages will also be marked as read.

Inbox						
Message Id	Sender	Recipient	Document Type	Timestamp	Status	
2006-08-02T0...	Creators Manuf...	Olivers Super ...	ORDERS	02 Aug 2:03:5...	EXPORTED	

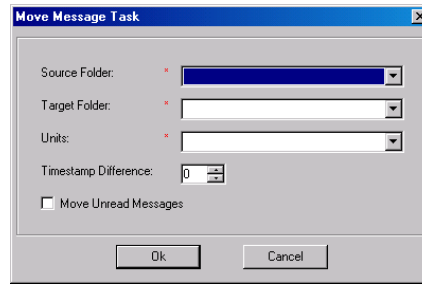
3. How to set up Task for Move Message

Move Message is a task that transfers a message to another folder in the iConnect Client. Messages are moved based on the age of the message.

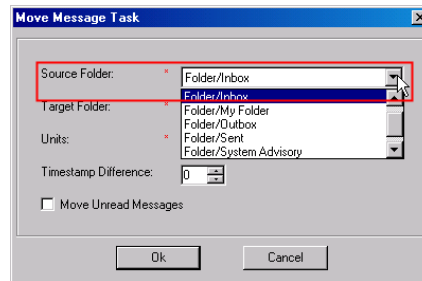
- Right click on **Move Message** from the **Task** dialog and select **Add New Move Message Task** from the popup menu.



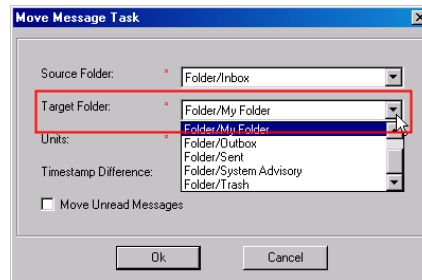
- b. A **Move Message Task** dialog will open.



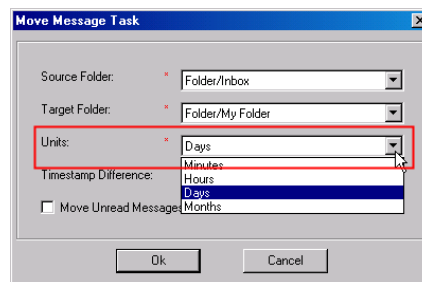
- c. Choose the location of the messages that will be moved. Folders may be selected from the list by clicking the ▾ button on the **Source Folder** field.



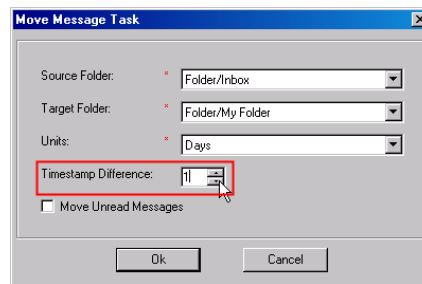
- d. Choose the destination of the messages. Folders may be selected from the list by clicking the ▾ button on the **Target Folder** field.



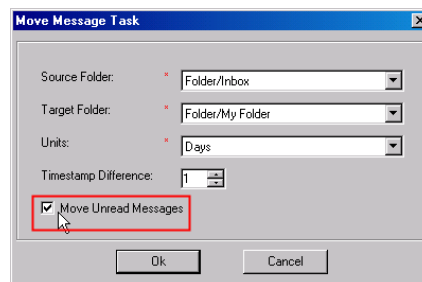
- e. Choose the time place value to consider for the age of the message to move. The place value can be in **Minutes, Hours, Days, or Months**.



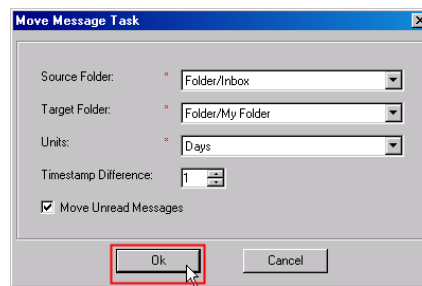
- f. Enter the age of the message to move on the **Timestamp Difference** field. This is the difference between the time this task was executed as against the timestamp of the message.



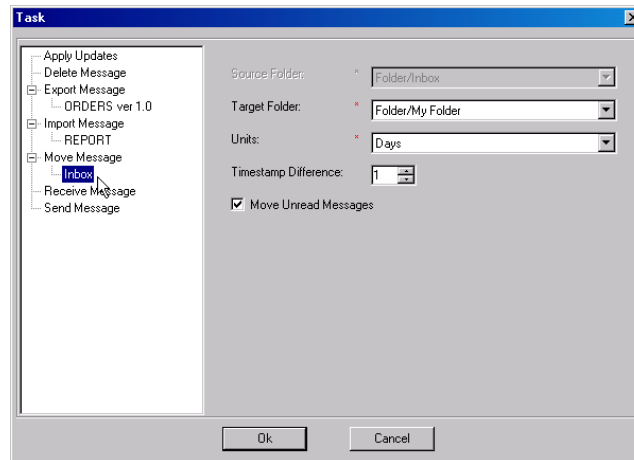
- g. Select the **Move Unread Messages** checkbox if messages that have been marked as UNREAD will also be moved.



- h. Click the **Ok** button to save the details for the new Move Message Task.



- i. The new Move Message Task will be listed in the lists of tasks under Move Message. The details of the created task can be viewed and edited by selecting it.



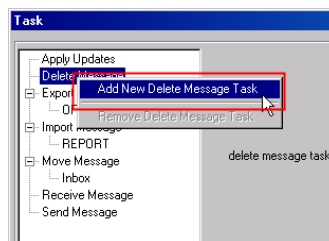
This is what will happen when this Move Message Task is executed:

The Move Message – Inbox will move all messages found in “**Folder/Inbox**” that are at least a day old to “**Folder/My Folder**”.

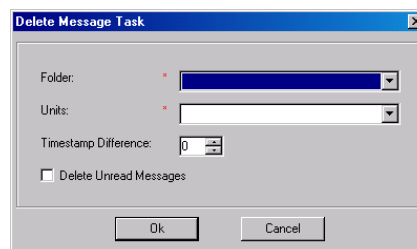
4. How to set up Task for Delete Message


Delete Message is a task that moves a message to the Trash folder in the iConnect Client. The message is permanently deleted if the message is in the Trash folder. Messages are deleted based on the age of the message.

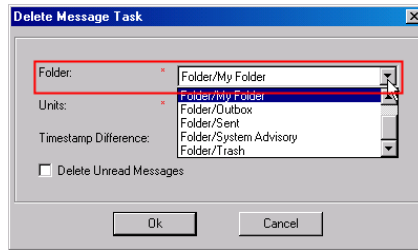
- a. Right click on **Delete Message** from the **Task** dialog and select **Add New Delete Message Task** from the popup menu.



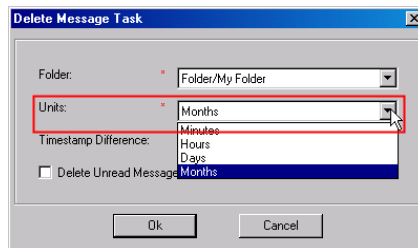
- b. A **Delete Message Task** dialog will open.



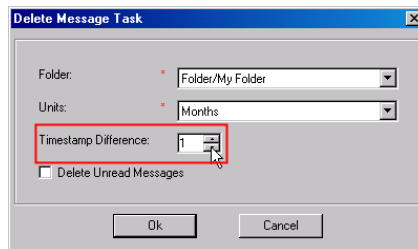
- c. Choose the location of the messages that will be deleted. Folders may be selected from the list by clicking the  button on the **Folder** field.



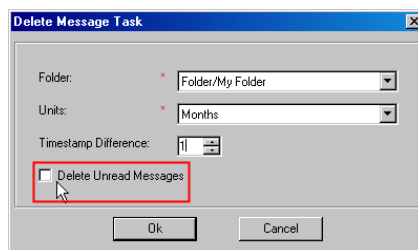
- d. Choose the time place value to consider for the age of the message to delete. The place value may be in **Minutes, Hours, Days, or Months**.



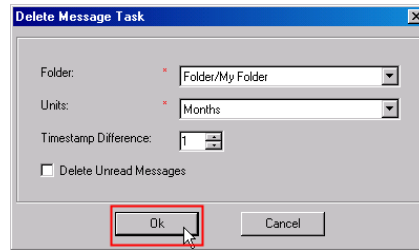
- e. Enter the age of the message to delete on the **Timestamp Difference** field. This is the difference between the time this task was executed as against the timestamp of the message.



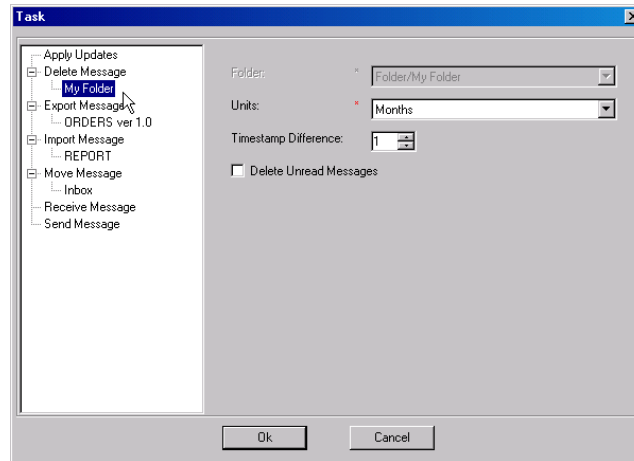
- f. Select the **Delete Unread Messages** checkbox if messages that have been marked as UNREAD will also be removed.



- g. Click the **Ok** button to save the details for the new Delete Message Task.



- h. The new Delete Message Task will be listed in the lists of tasks under Delete Message. The details of the created task can be viewed and edited by selecting it.



This is what will happen when this Delete Message Task is executed:

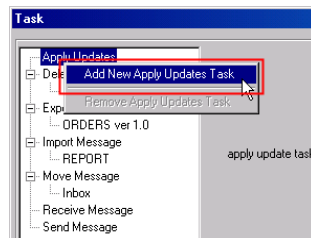
The Delete Message – My Folder will move all unread messages found in **“Folder/My Folder”** that are at least a month old to **“Folder/Trash”**.

5. How to set up Task for Apply Update

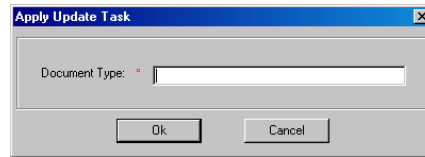
Apply Update is a task that installs the content of the message into the iConnect Client. This task will automatically restart the iConnect Client to install the update. It is recommended that Apply Update Tasks are executed after the other tasks have finished.

For details on how to make an update file, refer to [How to create an Update File](#) in section **V.A.**

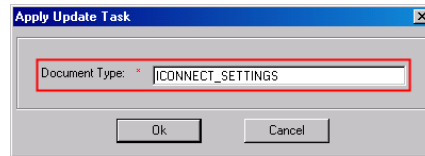
- a. Right click on **Apply Updates** from the **Task** dialog and select **Add New Apply Updates Task** from the popup menu.



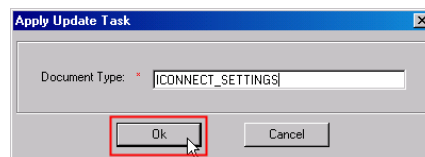
- b. An **Apply Update Task** dialog will open.



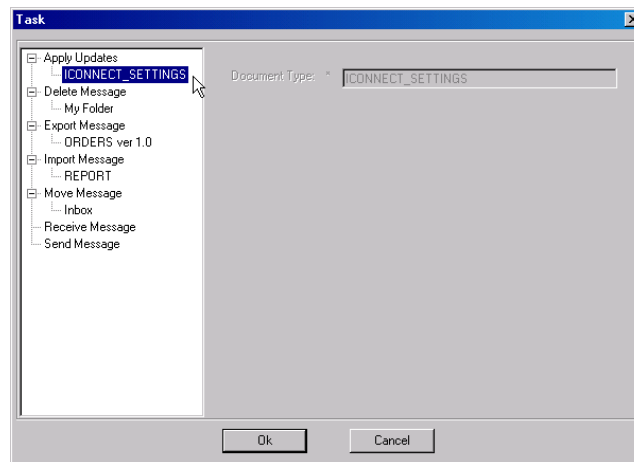
- c. Enter the type of message to be exported on the **Document Type** field.



- d. Click the **Ok** button to save the details for the new Apply Update Task.



- e. The new Apply Updates Task will be listed in the lists of tasks under Apply Updates. The details of the created task can be viewed by selecting it.



This is what will happen when this Apply Updates Task is executed:

The Apply Updates – ICONNECT_SETTINGS will export the patch file contained in the messages of type "**ICONNECT_SETTINGS**" found in the iConnect Client folder "**Folder/Inbox**" with a status of "**RECEIVED**" as "**FILE**" into the patches directory where the iConnect Client is installed. The iConnect Client will shut down and install the exported patch file. The iConnect Client will reopen when the installation has completed.

6. How to set up Send Message Task

Send Message Task uploads all the messages found in the **Outbox** folder of the iConnect Client with a status of **PREPARED**. No configuration is needed for this task.

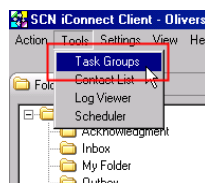
7. How to set up Receive Message Task

Receive Message Task downloads all the messages from the server. Messages of type "Acknowledgement" and "Error" will be stored in the Acknowledgement folder. Messages of type "System Advisory" will be stored in the System Advisory folder. Other messages will be stored in the **Inbox** folder of the iConnect Client. All retrieved messages will have a status of **RECEIVED**. No configuration is needed for this task.

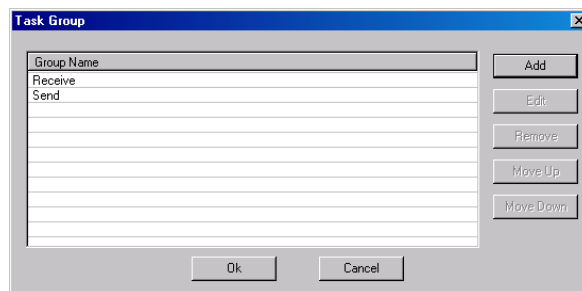
E. How to set up a Task Group

A Task Group is a list of tasks that were joined together to perform a single sequenced action. The first few items under the **Action** menu are the created Task Groups. It can be executed manually by selecting the task group from the menu bar (**Action – name of Task Group**). It can also be automatically executed by assigning a schedule to the Task Group. Refer to [How to set up the Scheduler](#) in section **IV.G** for more details.

Click **Tools – Task Groups** to open the **Task Groups** dialog.

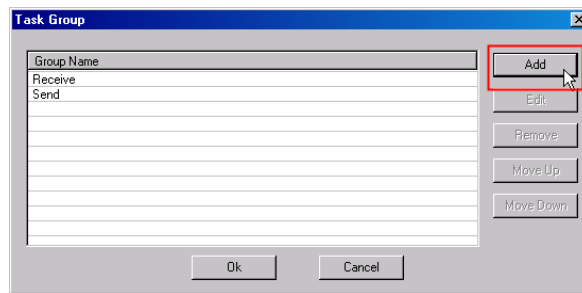


This is the **Task Group** dialog.

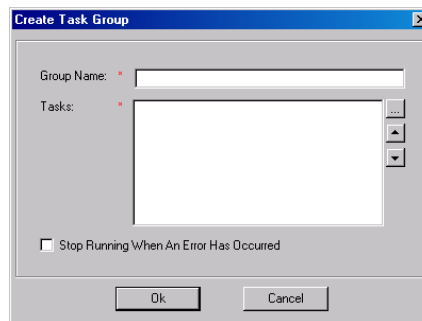


1. How to create a new Task Group

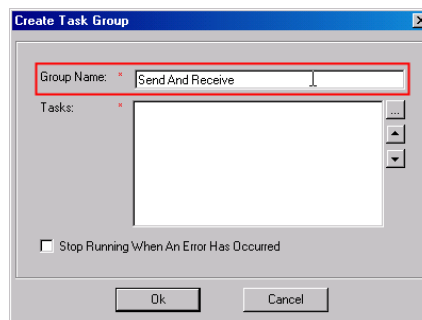
- a. Click the **Add** button in the **Task Group** dialog.




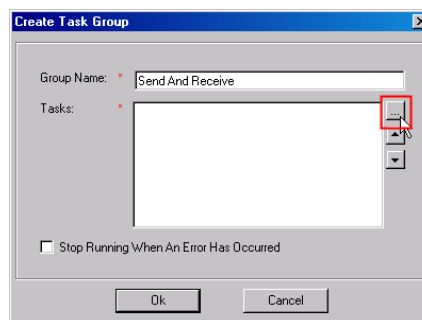
- b. A **Create Task Group** dialog will open.



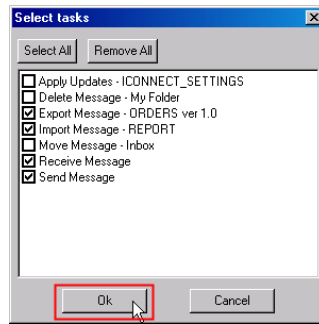
- c. Enter a name for the new Task Group on the **Group Name** field.



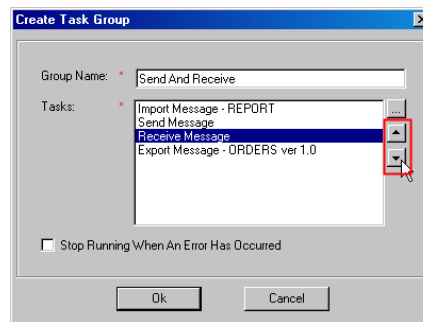
- d. Click on the  button to open the **Select Task** dialog.



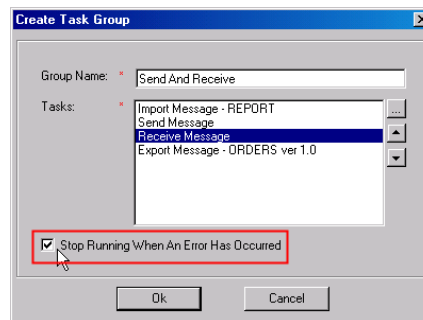
- e. On the **Select Task** dialog, mark the tasks that will be included in the new Task Group. Click **Ok** to add the selected task to the list.



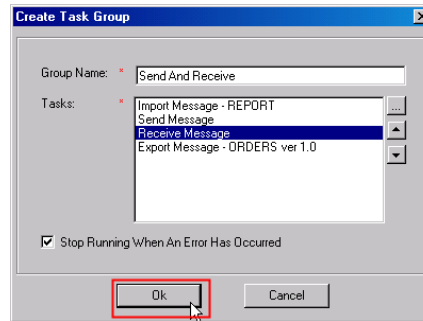
- f. The sequence of the task will be in the same order of the execution of tasks. Click the ▲ or ▼ buttons to move the selected tasks up or down the list respectively.



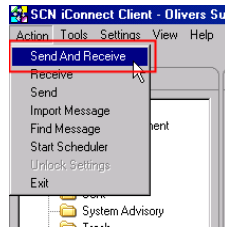
- g. The Task Group can be interrupted when an error has occurred within a task, avoid this by marking the **Stop Running When An Error Has Occurred** checkbox.



- h. Click **Ok** to create the new Task Group.



This Task Group will be available under the **Action** menu.

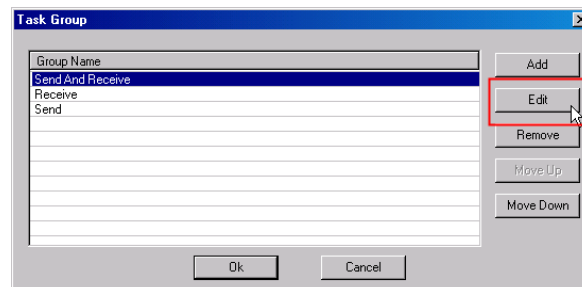


The Send And Receive Task Group will do the following tasks in this order: Import Message – REPORT, Send Message, Receive Message, and finally Export Message – ORDERS ver 1.0. This Task Group will stop if an error happens during the execution of the said tasks.

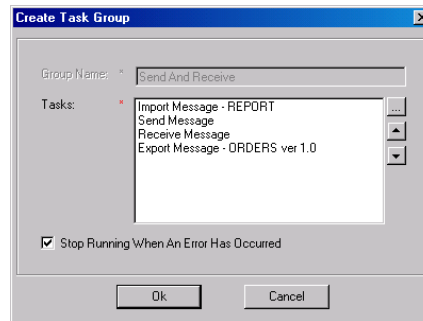
2. How to edit an existing Task Group

Existing Task Groups can be edited except for the Task Groups' name.

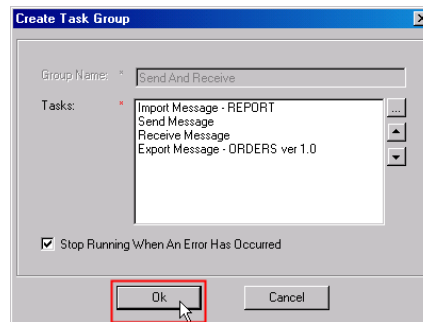
- a. Select the Task Group to change and click the **Edit** button in the **Task Group** dialog.



- b. The Create Task Group dialog will open. Make the changes for the Task Group.

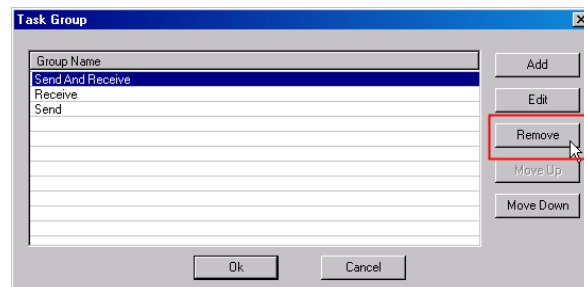


- c. Click **Ok** to update the Task Group.

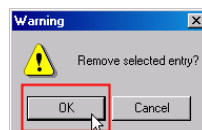


3. How to delete an Task Group

- a. On the **Task Group** dialog, select the Task Groups that will be deleted and click the **Remove** button.

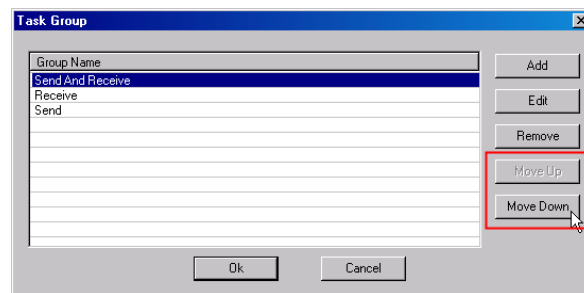


- b. Click **Ok** to confirm the deletion of the selected Task Groups.

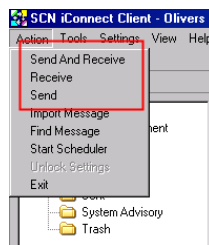


4. How to rearrange the order of Task Groups

The sequence of the Task Groups on the list will be the same sequence they will appear under the **Action** menu on the menu bar. Click the **Move Up** or **Move Down** buttons to move the selected tasks up or down the list respectively.



This example will have this result:



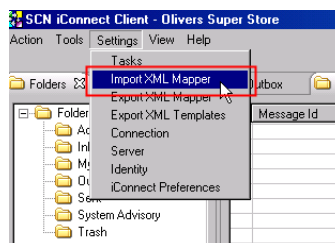
F. How to set up an XML Document

Extensible Markup Language (XML) Documents are files that are based on a template called a schema. XML Documents can be transformed from flat files like Comma Separated Value (CSV), to XML to formatted text. XML Documents are additional components for the iConnect Client. Refer to [How to update the iConnect Client](#) on section **V** for more details on installing new components.

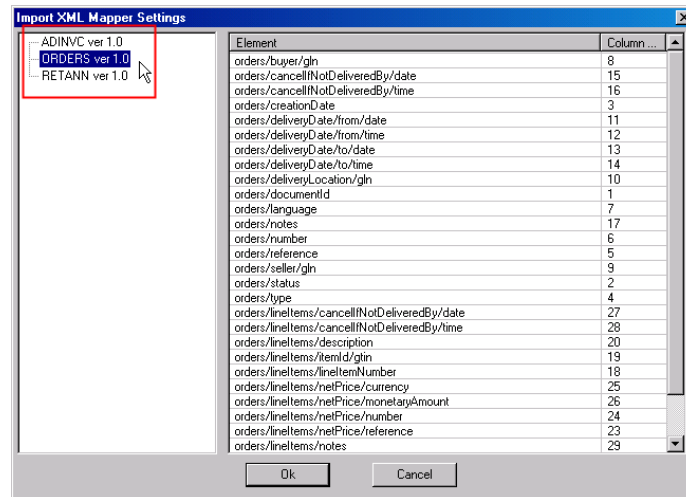
1. How to set up Import XML Mapper

Data in CSV files are transformed into XML by matching the column numbers in the CSV to an XML Element or Attribute. Default mapping configurations for the document types are already specified and may be changed if the user needs to.

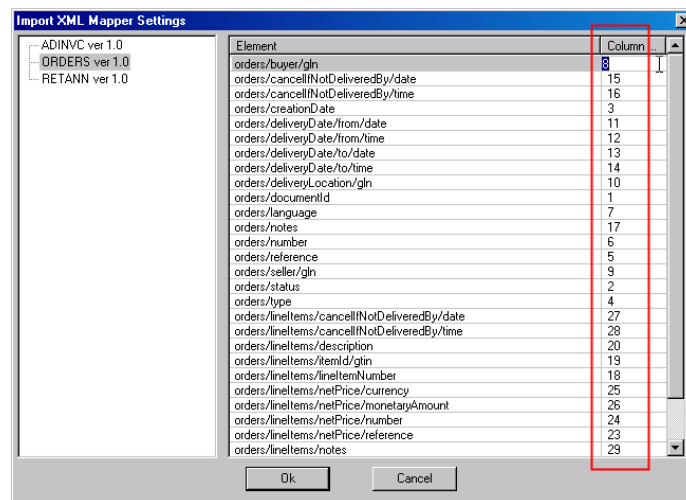
- a. Click **Settings – Import XML Mapper** on the menu bar to open the **Import XML Mapper** dialog.



- b. Select the Document Type to configure from the list on the left side of the dialog.

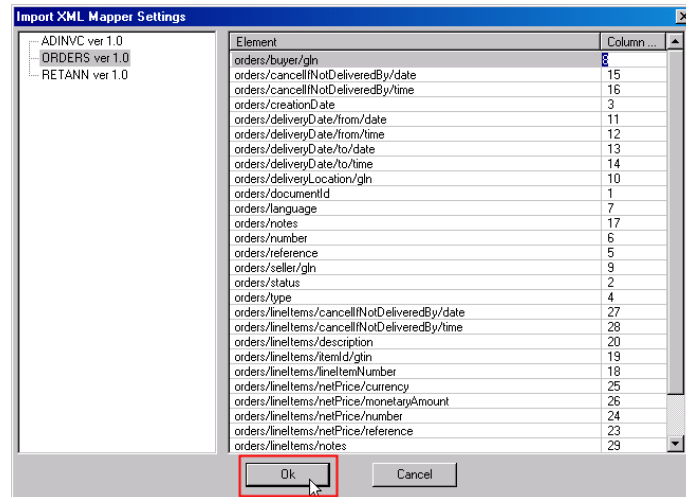


- c. Specify the column number where the XML Element or Attribute is located in the CSV file. Set the column number to "0" for optional elements and attributes that will not be used so that these data will not be included in the generated XML message.



Be careful when specifying the column values to avoid parsing errors when importing CSV files. Mandatory elements and attributes should always have a value and therefore not be left blank. Refer to the data dictionary of the XML Document for more details about each elements and attributes.

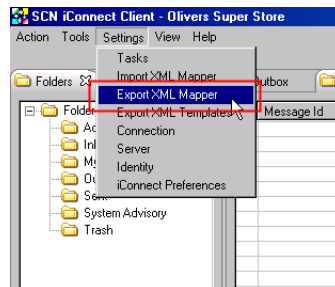
- d. Click **Ok** to save the changes.



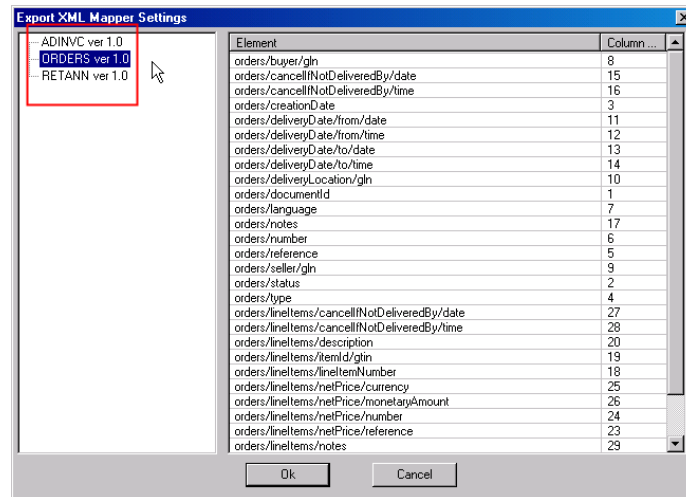
2. How to set up Export XML Mapper

Messages containing XML documents can be exported into CSV files by matching the XML Element or Attributes to a column numbers in the CSV. Default mapping configurations for all document types are already provided and may be changed if the user needs to.

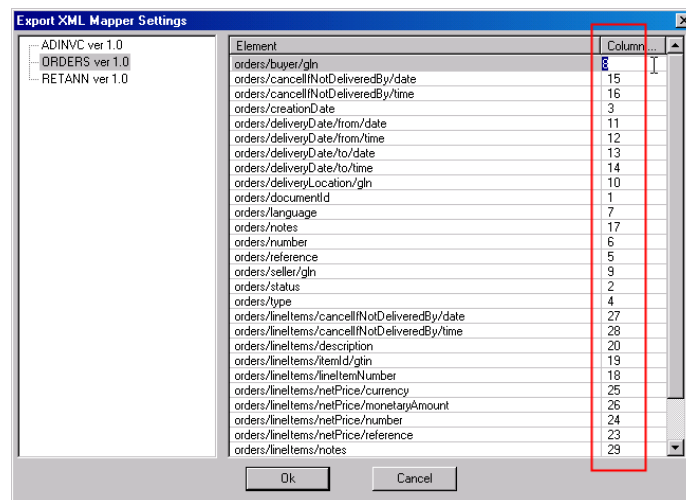
- a. Click **Settings – Export XML Mapper** on the menu bar to open the **Export XML Mapper** dialog.



- b. Select the Document Type to configure from the list on the left side of the dialog.

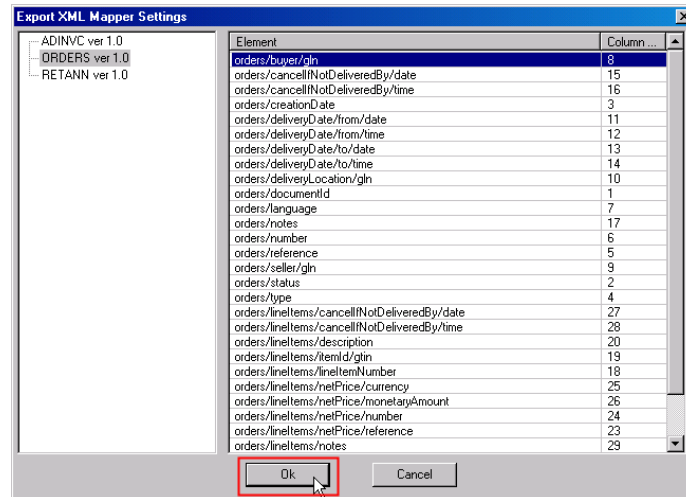


- c. Specify the column number where the XML Element or Attribute is located in the CSV file. Set the column number to "0" for elements and attributes that will not be used so that these data will not be included in generated CSV file.



Be careful when specifying the column values to avoid parsing errors when exporting to CSV files. Try not to assign similar column values to elements and attributes as this may cause unpredictable outputs.

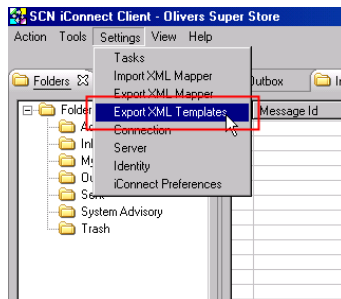
- d. Click **Ok** to save the changes.



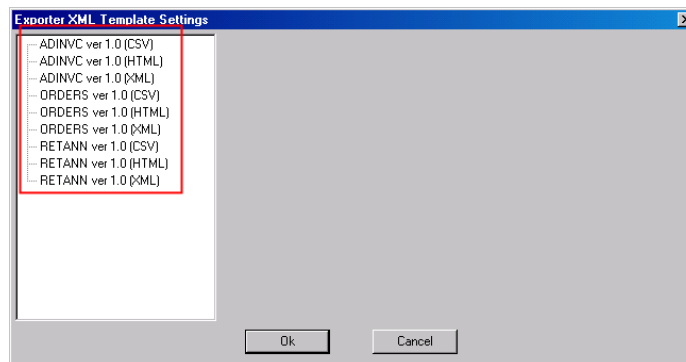
3. How to set up Export XML File Name Templates

The File Name template defines how the file name will be generated for the selected type of message and file type. Knowledge of Freemarker (<http://freemarker.sourceforge.net>) is needed when editing the templates.

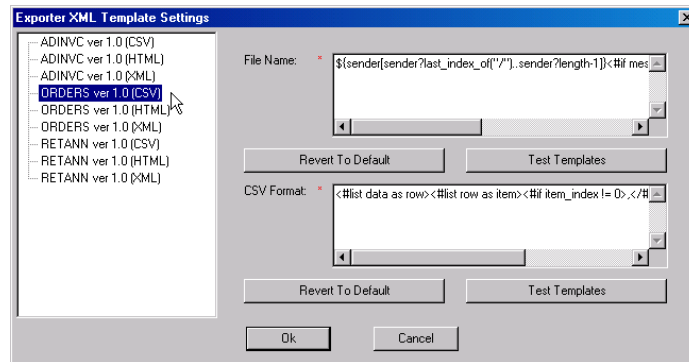
- a. Click the Settings – Export XML Template from the menu bar to open the Export XML Template Settings dialog.



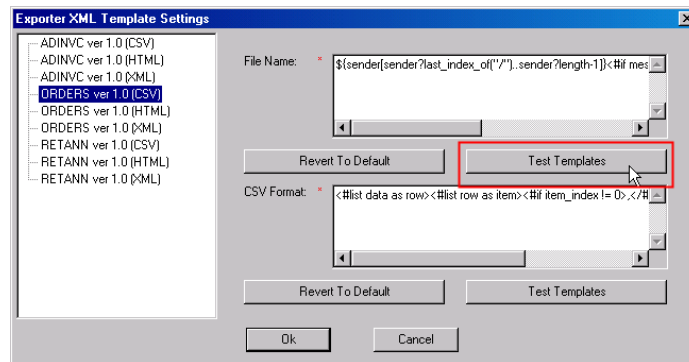
- b. This is the Export XML Template Settings dialog. All installed XML documents are listed on the left side of the dialog.



- c. The File Name template uses the following data model names to generate the file name:
- **messageId**: the message Id of the message
 - **documented**: the document Id of the message
 - **sender**: the party Id of the sender of the message
 - **recipient**: the party Id of the recipient of the message
 - **type.name**: the name of the document type used by the message
 - **type.format**: the format of the document type used by the message
 - **type.version**: the version of the document type used by the message
 - **filename**: the file name of the content of the message where it was originally imported from
- d. Select the document type that will be edited from the list on the left side of the Export XML Template Settings dialog.



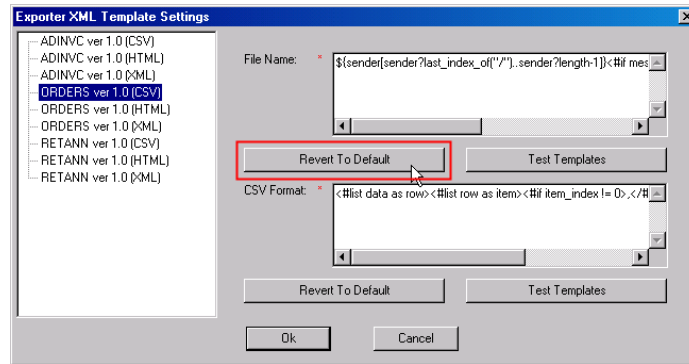
- e. After editing the template, click the Test Templates button for the File Name field to check the template.



All tests use the following sample values for each of the data model:

- **messageId**: 2005-08-27T23:00:51.7149Z@scn1.scn.ph
- **documented**: 1111
- **sender**: http://www.gs1ph/party/senderGln
- **recipient**: http://www.gs1ph/party/recipientGln
- **type.name**: the name of the chosen document type
- **type.format**: FILE
- **type.version**: the version of the chosen document type
- **filename**: filename.dat

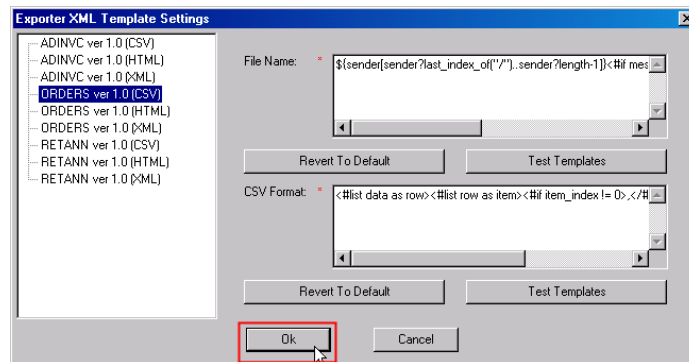
If unsure of the template, change the template back to its default value by clicking the **Revert to Default** button for the File Name field.



The default file name template for the document type ORDERS version 1.0 with a CSV file type will generate this file name:

senderGln_2005-08-27T23,00,51.7149Z@scn1.scn.ph.ORDERS.csv

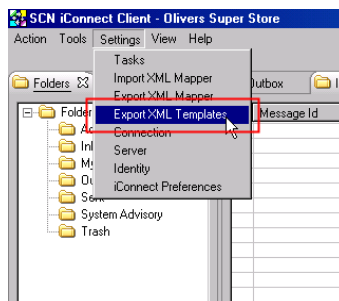
- f. Click Ok to save the changes on the template.



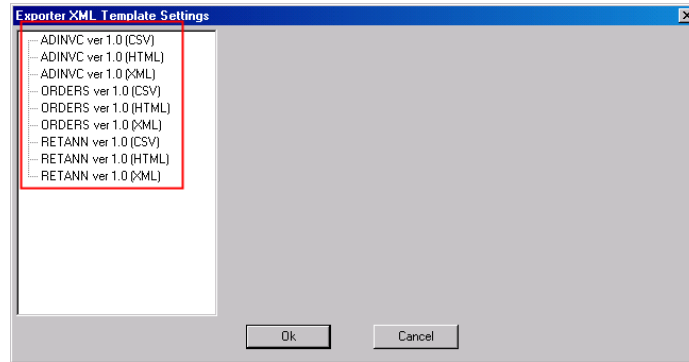
4. How to set up Export CSV Generator Template

The CSV template defines how the CSV file will be generated for this type of message. Only CSV file types have these templates. Knowledge of Freemarker (<http://freemarker.sourceforge.net>) is needed when editing the templates.

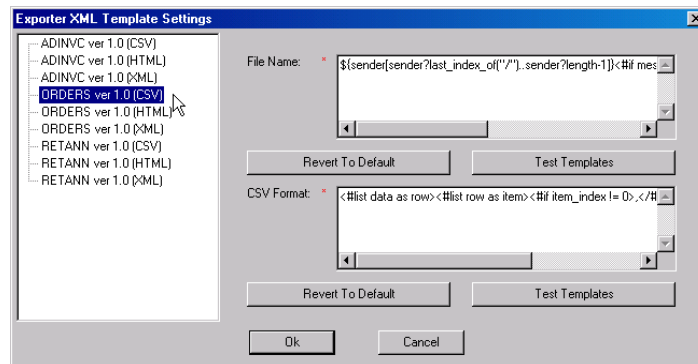
- a. Click the Settings – Export XML Template from the menu bar to open the Export XML Template Settings dialog.



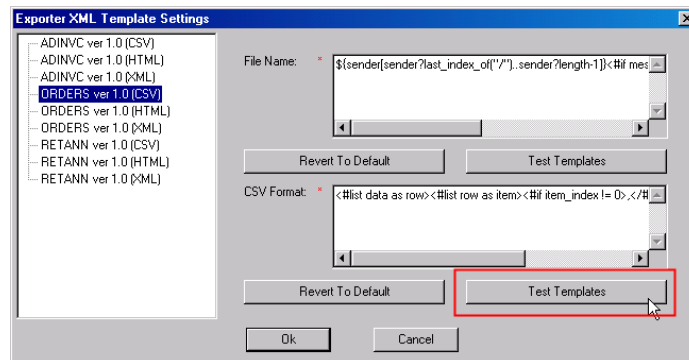
- b. This is the Export XML Template Settings dialog. All installed XML documents are listed on the left side of the dialog.



- c. The template uses the following data model names to generate the CSV file:
- **data**: the name of the object that contains the content of the CSV file
- d. Select the document type with the file type of CSV that will be edited from the list on the left side of the Export XML Template Settings dialog.



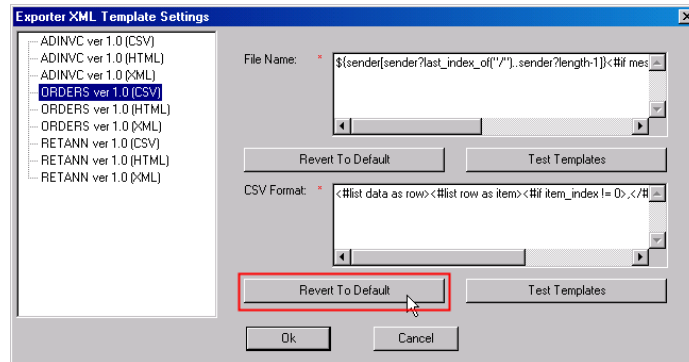
- e. After editing the template, click the Test Templates button for the CSV Format field to check the template.



All tests use the following sample values for each of the data model:

- **data**: a list of list of items for each column

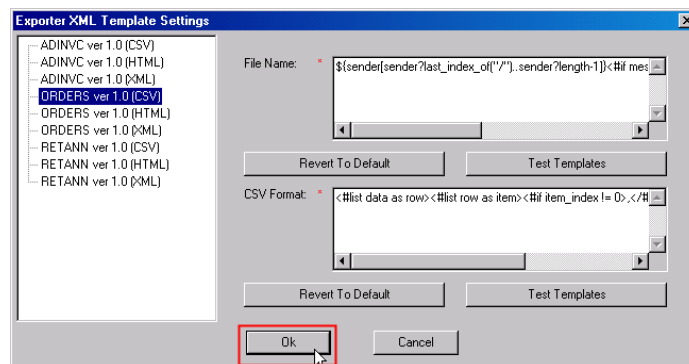
If unsure of the template, change the template back to its default value by clicking the ***Revert to Default*** button for the CSV Format field.



The default CSV template for the document type ORDERS version 1.0 will generate a file with this content:

row1-data1,row1-data2,row1-data3,row1-data4
row2-data1,row2-data2,row2-data3,row2-data4

- f. Click Ok to save the changes on the template.



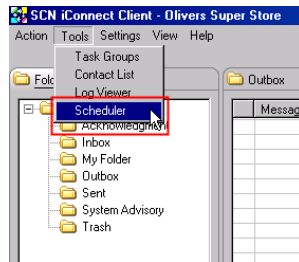
5. How to set up a Stylesheet for an XML Document

Most XML document types have a default stylesheet installed in the iConnect Client. Other stylesheets that are made specifically for an entity can be installed as a separate update file. Check the list of updates that are available for download or call SCN Technical Support Group. Refer to [***How to Update the iConnect Client***](#) in section **V** for details on downloading and installing update files.

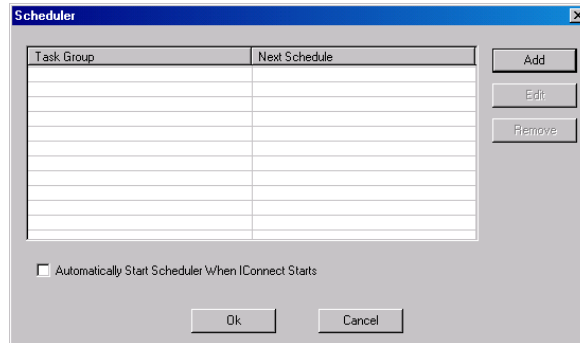
G. How to set up the Scheduler

The Scheduler automates the activities of the iConnect Client by enabling Task Groups to be executed automatically on a specified date and time. All events during the scheduled activity can be monitored in the Realtime Logger panel. Users can still do other operations while the scheduler is active.

To open the **Scheduler** dialog, click **Tools – Scheduler** from the menu bar.

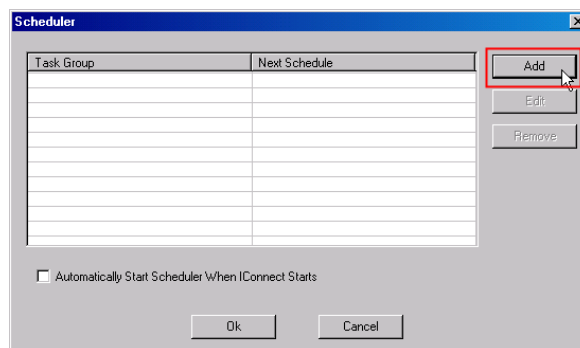


This is the **Scheduler** dialog.

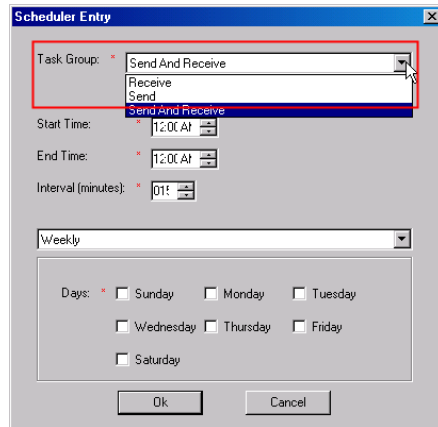


1. How to schedule a Task Group

- a. On the **Scheduler** dialog, click the **Add** button to create a new schedule. This will open a **Scheduler Entry** dialog.

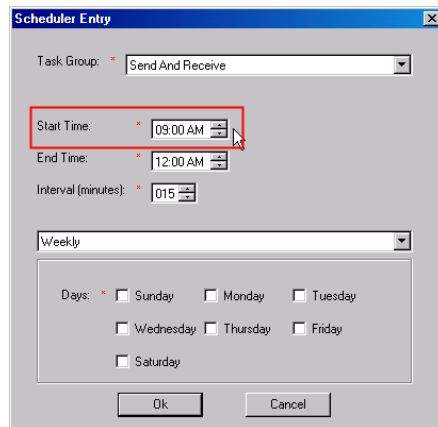


- b. Choose the Task Group for the new schedule.



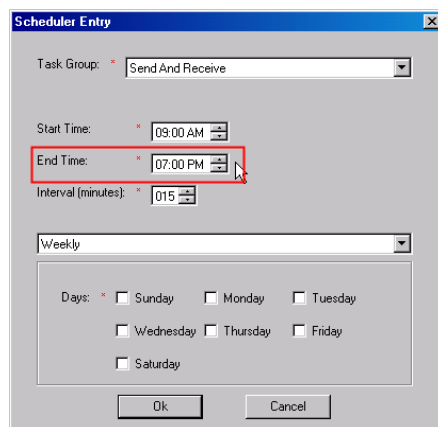
The screenshot shows the 'Scheduler Entry' dialog box. The 'Task Group' dropdown menu is open, displaying three options: 'Send And Receive', 'Receive', and 'Send'. The 'Send And Receive' option is highlighted. The 'Start Time' is set to '12:00 AM', 'End Time' is '12:00 AM', and 'Interval (minutes)' is '015'. The frequency is set to 'Weekly'. The 'Days' section shows checkboxes for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, all of which are currently unchecked. The 'Ok' and 'Cancel' buttons are at the bottom.

- c. Specify the time the Task Group will begin its schedule.



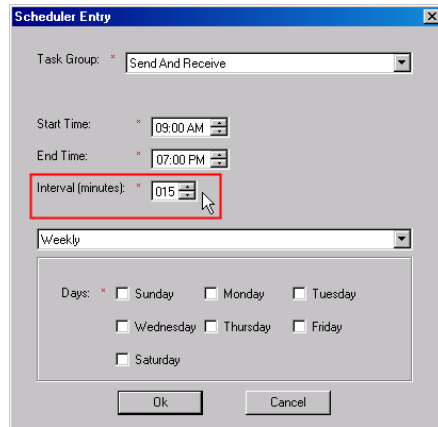
The screenshot shows the 'Scheduler Entry' dialog box. The 'Task Group' is set to 'Send And Receive'. The 'Start Time' field is highlighted with a red box and shows '09:00 AM'. The 'End Time' is '12:00 AM' and the 'Interval (minutes)' is '015'. The frequency is 'Weekly'. The 'Days' section shows checkboxes for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, all of which are currently unchecked. The 'Ok' and 'Cancel' buttons are at the bottom.

- d. Specify the time the Task Group will end its schedule.



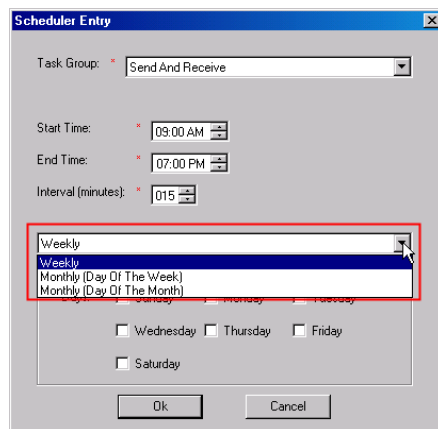
The screenshot shows the 'Scheduler Entry' dialog box. The 'Task Group' is set to 'Send And Receive'. The 'Start Time' is '09:00 AM' and the 'End Time' field is highlighted with a red box, showing '07:00 PM'. The 'Interval (minutes)' is '015'. The frequency is 'Weekly'. The 'Days' section shows checkboxes for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, all of which are currently unchecked. The 'Ok' and 'Cancel' buttons are at the bottom.

- e. Specify the intervals between executions of the Task Group in minutes.



The 'Scheduler Entry' dialog box is shown with the 'Task Group' set to 'Send And Receive'. The 'Start Time' is 09:00 AM and the 'End Time' is 07:00 PM. The 'Interval (minutes)' is set to 015, which is highlighted with a red rectangle. Below this, the frequency is set to 'Weekly'. The 'Days' section shows checkboxes for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday, all of which are currently unchecked. 'Ok' and 'Cancel' buttons are at the bottom.

- f. Choose the type of days to schedule the Task Group.

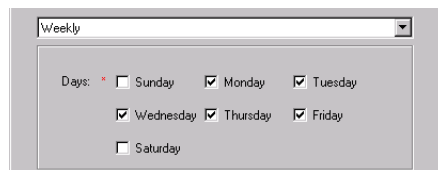


The 'Scheduler Entry' dialog box is shown with the same settings as before. The 'Interval (minutes)' is 015. The frequency dropdown menu is open, showing options: 'Weekly', 'Monthly (Day Of The Week)', and 'Monthly (Day Of The Month)'. The 'Weekly' option is highlighted with a blue bar and a red rectangle. The 'Days' section below remains unchanged with all checkboxes unchecked. 'Ok' and 'Cancel' buttons are at the bottom.

This can be any of the following:

- **Weekly**

The Task Group will be executed on the selected the days of the week.

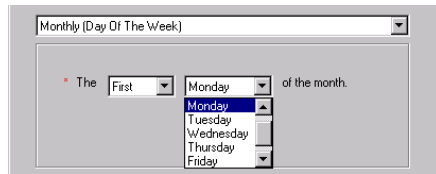


The 'Scheduler Entry' dialog box is shown with the frequency set to 'Weekly'. The 'Days' section now has checkboxes for Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. Monday, Tuesday, Wednesday, Thursday, and Friday are checked, while Sunday and Saturday are unchecked. 'Ok' and 'Cancel' buttons are at the bottom.

This example will execute the Task Group from Mondays to Fridays

- **Monthly (Day of the Week)**

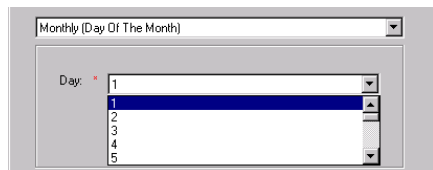
The Task Group will be executed on the selected day of the week within the selected week of the month.



This example will execute the Task Group every "first" "Mondays" of the month.

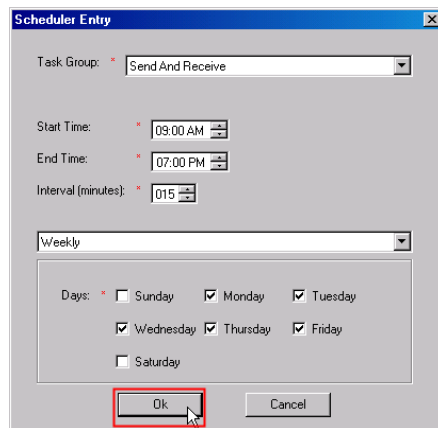
- **Monthly (Day of the Month)**

The Task Group will be executed on the selected date.

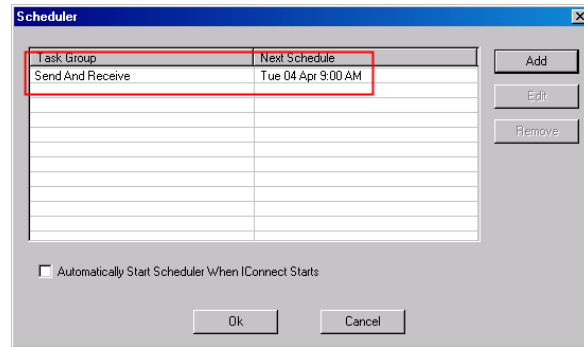


This example will execute the Task Group on the first day of the month.

- g. Click **Ok** to create the new schedule using the specified parameters.

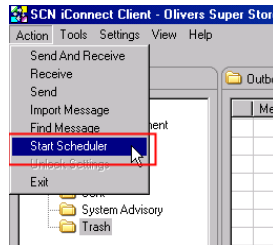


- h. The new schedule will be listed showing the Task Group and the date and time it is scheduled to run.



2. How to start the Scheduler

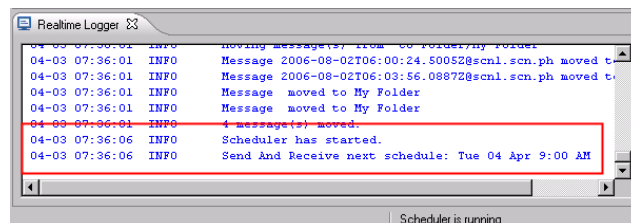
Click **Action – Start Scheduler** on the menu bar to activate the scheduler.



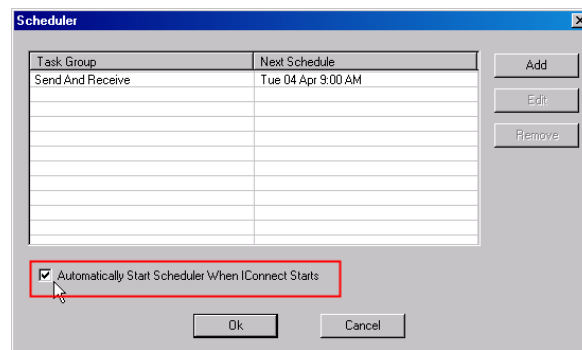
The iConnect Client icon in the system tray will change to show that the scheduler has been started.



Details of the created schedules will be listed on the **Realtime Logger** panel.

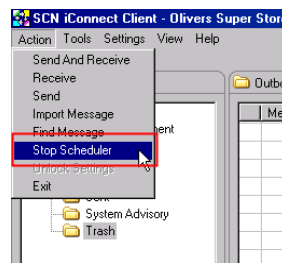


The iConnect Client can be configured to activate the Scheduler when it is opened by marking the ***Automatically Start Scheduler When IConnect Starts*** checkbox in the ***Scheduler*** dialog.



3. How to stop the Scheduler

Click ***Action – Stop Scheduler*** on the menu bar to deactivate the scheduler.

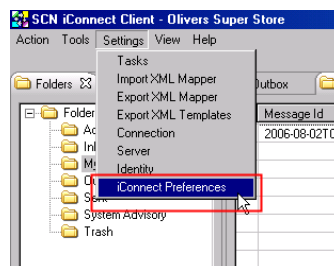


The iConnect Client icon on the system tray will change to show that the scheduler is not running.

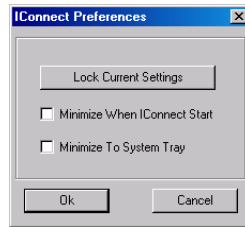


H. How to use the iConnect Preference

Click ***Settings – iConnect Preference*** from the menu bar to open the ***iConnect Preference*** dialog.



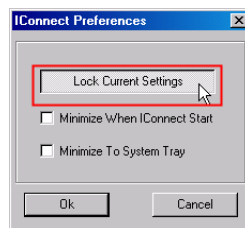
This is the **iConnect Preference** dialog.



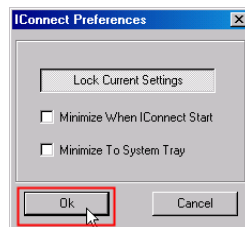
1. How to lock the settings of the iConnect Client

The iConnect Client has the option to disable the editing of its settings for security reasons. To do this,

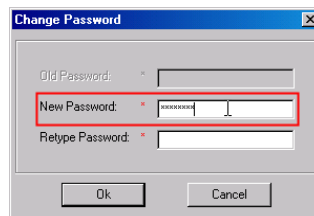
- a. Click the **Lock Current Settings** button in the **iConnect Preference** dialog.



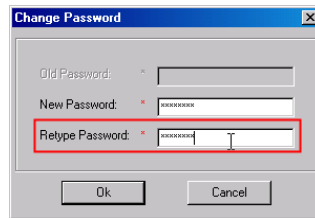
- b. Click the **Ok** button to save the changes made.



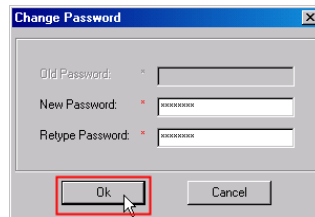
- c. A password dialog will open. Enter a password that will be used to lock the settings. The password must be at least six characters.



- d. Confirm the password that was entered.

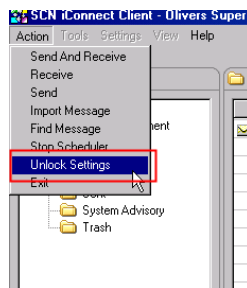


- e. Click the **Ok** button to save the password.

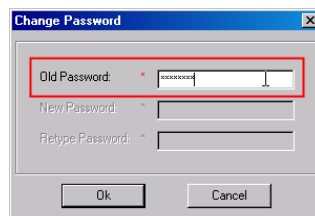


2. How to unlock the settings of the iConnect Client

- a. To unlock the settings, click **Action – Unlock Settings** on the menu bar.



- b. A password dialog will open. Enter the password used to lock the settings.



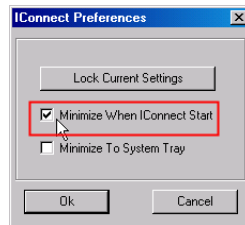
- c. Click the **Ok** button to unlock the settings.



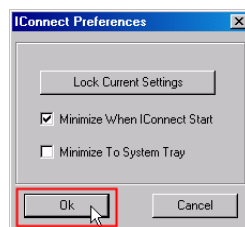
3. How to set the iConnect Client to start minimized

The iConnect Client has the option to minimize itself after it has finished initializing. This reduces clutter on the user's desktop. Enabling this and the "**Minimize To System Tray**" options will cut down the memory usage of the application.

- a. Mark the **Minimized When IConnect Starts** checkbox on the **iConnect Preference** dialog.



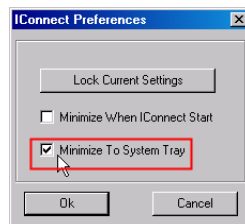
- b. Click the **Ok** button to save the changes made.



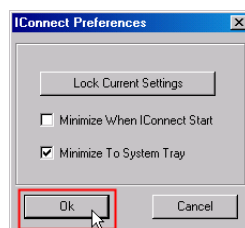
4. How to set the iConnect Client to minimize to the system tray

The iConnect Client has the option to set itself minimized to the system tray to cut down memory usage of the application when it is minimized.

- a. Mark the **Minimized To System Tray** checkbox on the **iConnect Preference** dialog.



- b. Click the **Ok** button to save the changes made.



When minimized, the iConnect Client can be accessed through the icon on the system tray. The same menus under the **Action** menu of the iConnect Client is available from the icon by right clicking on it.



Selecting **Restore** from the popup menu will open the iConnect Client window.



V. How to update the iConnect Client

The iConnect Client uses patch files to update the application. Patch files have **.patch** as their extension. These files are also used to install new components or upgrades for the iConnect Client application. Regularly, check the list of available patches to ensure that the iConnect Client is always up-to-date.

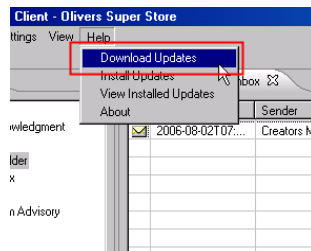
A. How to create an Update File

There are some components created for the iConnect Client that can create patch files. Call the SCN Technical Support or browse through the available updates that can be downloaded from the server.

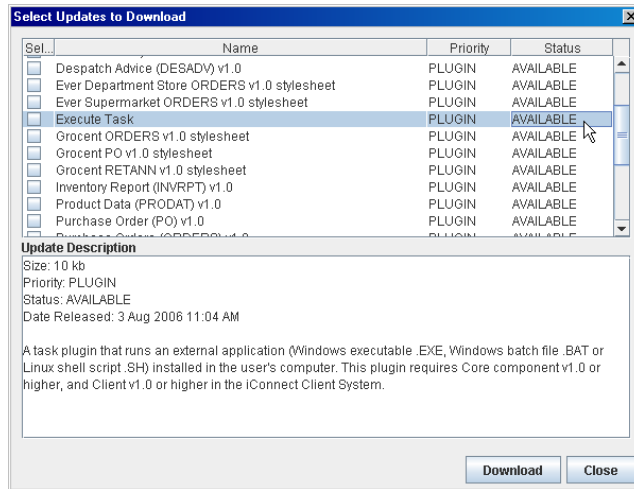
B. How to download an update from the server

All available components and upgrades can be downloaded from the iConnect server. An internet connection is required to connect to the server. The identity of the iConnect Client must also be configured to download updates.

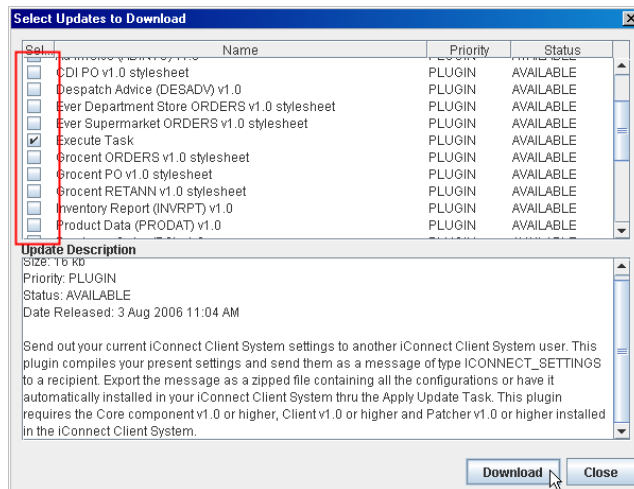
1. Click **Help – Download Updates** from the menu bar of the iConnect Client.



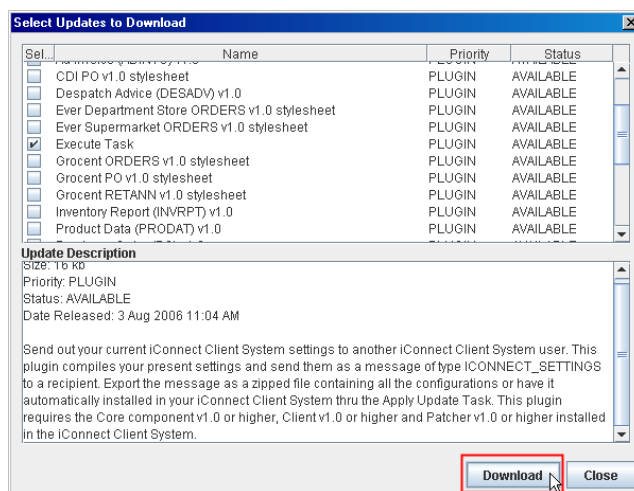
2. A window will open containing the list of patches that is available for downloading. Click on a patch to view a description of the update.



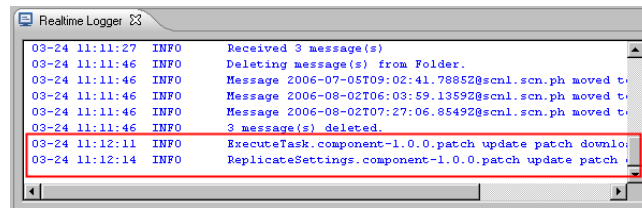
3. Select the patches that will be downloaded by marking the checkbox of the patch.



4. Click the **Download** button to begin the downloading of the selected patches.



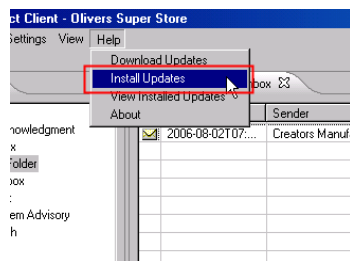
A message will be posted on the Realtime Logger panel when a patch has been downloaded. All downloaded patches will be saved in the **patches** directory where the iConnect Client is installed.



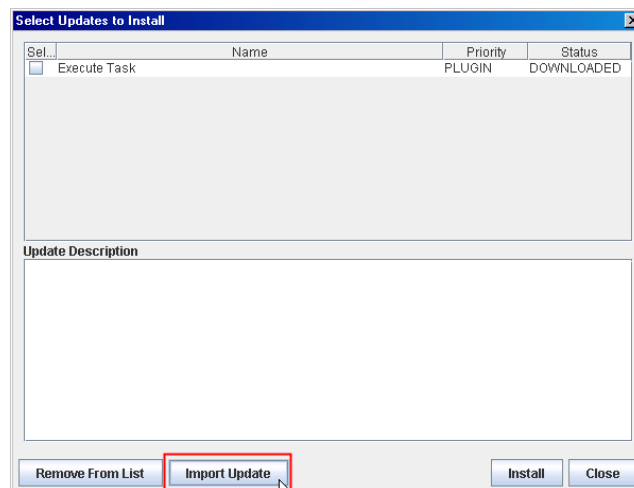
C. How to import an update

Update files that have been acquired other than downloading from the server can be imported into the iConnect Client for installation.

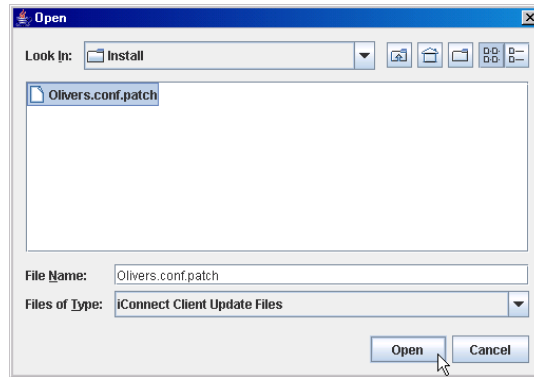
1. Click **Help – Install Updates** from the menu bar of the iConnect Client.



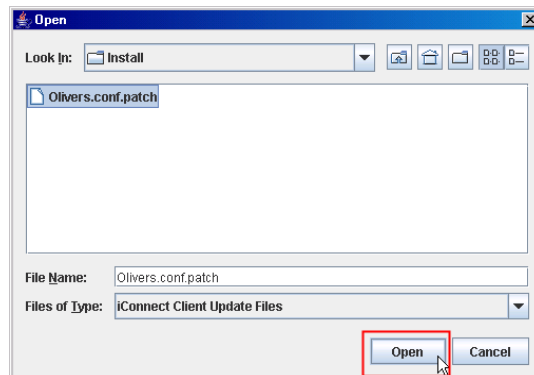
2. A window will open containing the list of patches that is available for installing. Click the **Import Update** button.



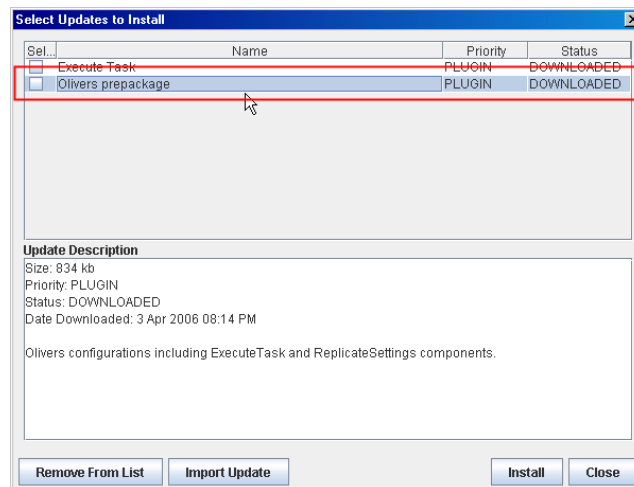
3. A file dialog will open. Locate and select the update file to import.



4. Click the **Open** button to import the selected file.

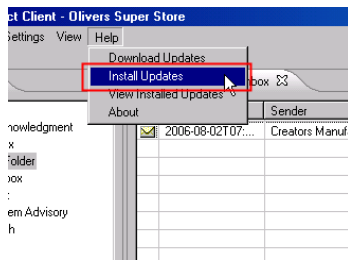


The selected file will be copied to the **patches** directory where the iConnect Client is installed. It will also appear on the list of updates that is available for installing.

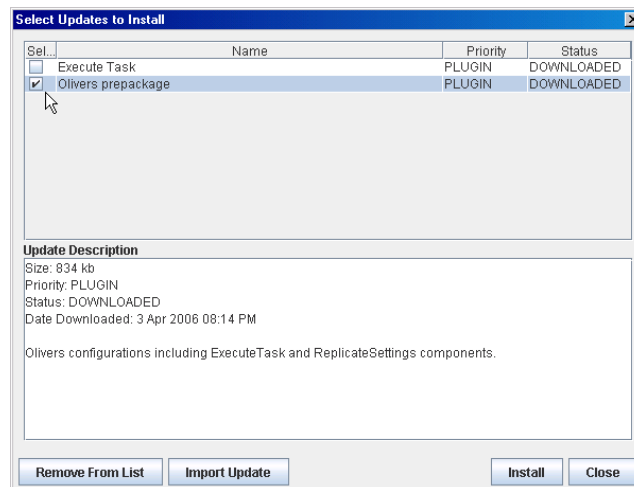


D. How to install an update

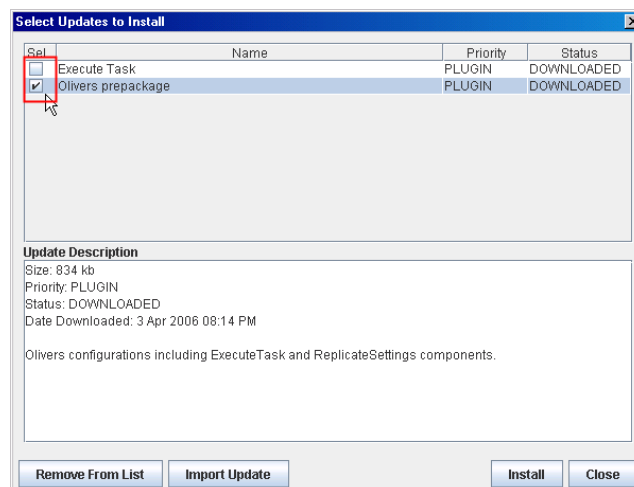
1. Click **Help – Install Updates** from the menu bar of the iConnect Client.



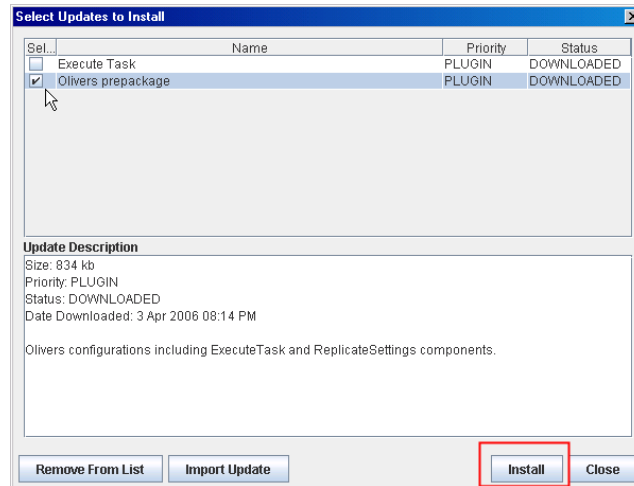
2. A window will open containing the list of patches that is available for installing. Click on a patch to view a description of the patch.



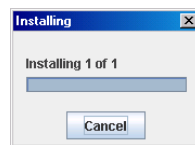
3. Select the patches that will be installed by marking the checkbox of the patch.



- Click the **Install** button to install selected patches. This will require the iConnect Client to restart.



- The selected patches will be installed before the iConnect Client starts. A dialog will open to show the progress of the installation. Details of the installation process are saved in the file **patcher.log** in the directory where the iConnect Client is installed.

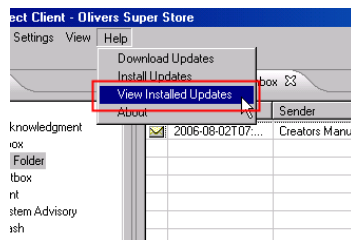


- The iConnect Client will start after the installation has completed. All patches that have been successfully installed will be removed from the list of patches to be installed.

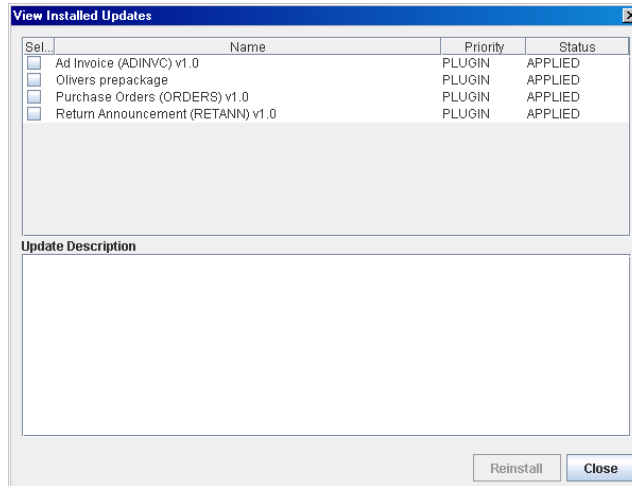
E. How to view installed components in the iConnect Client

The iConnect Client keeps a record of all the components and patches installed.

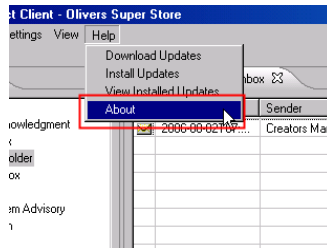
Click **Help – Applied Updates** on the menu bar of the iConnect Client to view all patches installed.



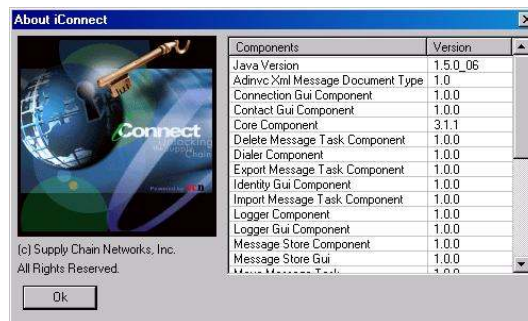
This dialog will open.



Click **Help – About** on the menu bar of the iConnect Client to view the components and their versions installed.



This dialog will open.



VI. How to keep track of the activities of the iConnect

A. What do the logs mean

All activities within the iConnect Client application are logged to monitor the actions being done. This information can be very useful for tracking past actions and debugging erroneous processes.

Logs are written in this format:

mm-dd HH:MM:ss (LOG_LEVEL) message

Example:

03-30 13:18:51 (INFO) Exported 1 message(s)

This means that on March 30, 13 hours (or 1pm), 18 minutes, 51 seconds, an INFO log has been recorded with the message "Exported 1 message(s)".

The following are the definitions of each type of log:

Debug - This log contains detailed information of the current process. Logs in this level will be most helpful for troubleshooting possible error or tracking down activities of the program. This level can only be seen in the Log Viewer.

Info - This log contains informative messages that states current status of the current process.

Warning - This log contains messages to warn potentially erroneous process.

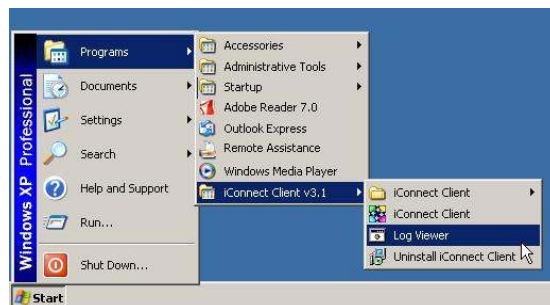
Error - This log contains the details of the error. Usually these messages are followed by a description and the location of the module where the error has occurred.

All log files are found in the **logs** directory where the iConnect Client application is installed. All log files are sorted in months and follows a file naming format of **clientLog_mmdd_partx.log** where **mm** is month, **dd** is date, and **x** is a sequence number.

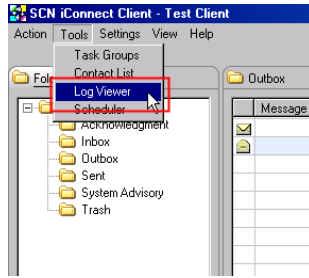
B. How to use the Log Viewer

Log files can be viewed through the **Log Viewer**. The Log Viewer checks for possible tampering of the log file for authenticity and completeness.

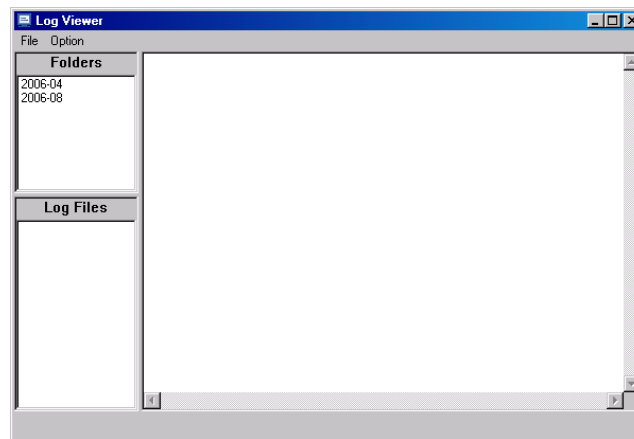
The Log Viewer can be opened by clicking Log Viewer icon found in the Start Menu. Click **Start – All Programs – iConnect Client v3.1 – Log Viewer**.



The Log Viewer can also be opened through the iConnect Client. Click **Tools – Log Viewer** on the menu bar of the iConnect Client.

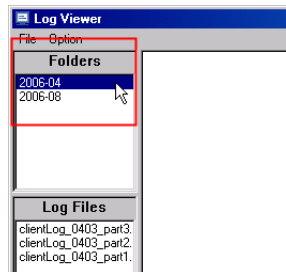


This is the **Log Viewer** dialog.

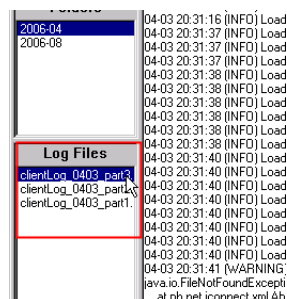


1. How to open a log file

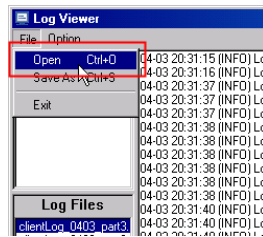
Select the folder that contains the log file that will be opened from the upper-left side of the **Log Viewer** dialog. Only the folders under the **logs** directory in the iConnect Client are listed here.



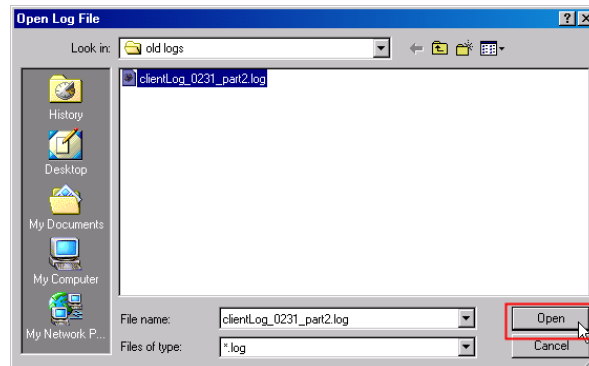
A list of log files that are found in the selected folder will appear at the lower-left side of the **Log Viewer** dialog. Select the file that will be opened.



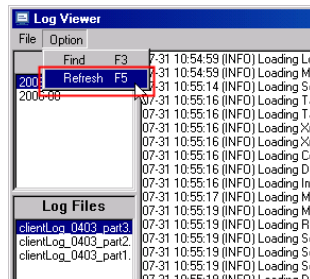
If the log file is not found within the **logs** directory of the iConnect Client, click **File – Open** on the menu bar of the **Log Viewer** dialog.



A file dialog will open. Locate and select the log file to open. Click the **Open** button of the file dialog to open the log file.

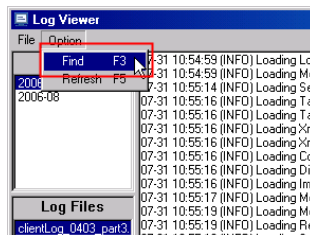


Log files can be updated by clicking **Option – Refresh** on the menu bar of the **Log Viewer** dialog.

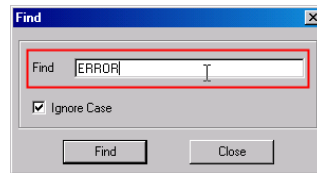


2. How to find a text in a log file

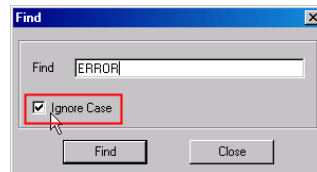
- Click **Option – Find** on the menu bar of the **Log Viewer** dialog.



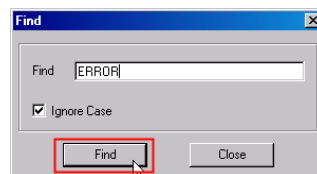
- b. Enter the text to search within the opened log file.



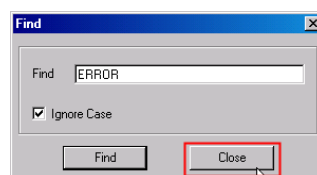
- c. Mark the **Ignore Case** check box if the search is not case-sensitive.



- d. Click the **Find** button to start the search. This will search from the present location of the cursor up to the end of the log file.

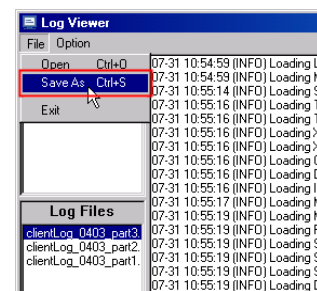


- e. Click the **Close** button to end the search.

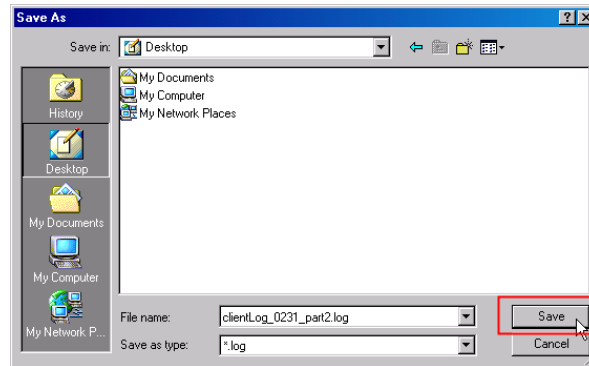


3. How to save a log file

- a. Open the log file that will be saved then click **File – Save As** on the menu bar of the **Log Viewer** dialog.



- b. A file dialog will open. Select the directory and filename to save the log file. Click the **Save** button of the file dialog to save the log file.



VII. Appendix

A. Notes on Proxy Server Setup

The iConnect Client System is a stand-alone Java application that is capable of sending and receiving messages to/from a secured web server. iConnect Client is dependent on the environment settings in the Java Virtual Machine or JVM, and by default the JVM is configured for a proxy server access. By using the Connection Settings dialog window, the JVM is configured for proxy server access. The JVM only supports Hypertext Transfer Protocol over Secure Socket Layer or HTTPS proxy settings using the Host (IP Address) and Port parameters. Proxy server authentication is done with Java's http proxy settings, which include a username, password, Host, and Port parameters. In the case of the iConnect Client System, the web server is accessed through an https connection.

If the computer used is behind a firewall, the proxy server must handle HTTPS requests to visit a secure Web site on the Internet. However, there is one significant difference between a proxy server processing HTTP requests and HTTPS requests. For HTTP requests, the proxy server is able to parse the communication content and exercise a lot more discretion on policing the traffic including the drop of connection at the appropriate time (a proxy server always assumes HTTP connections are non-persistent).

On the other hand, the proxy server is able to decipher HTTPS connections because of encryption, so it has no choice but to relay the data intact and cannot drop the connection unless the client and or the server desires to. Another "secret" of HTTPS proxy connection is that the actual client/server communication does not encrypt or involve SSL, even though this type of connection is often called SSL Tunneling. Again, this is because the proxy server assumes that the subsequent communication is not readable.

iConnect Client uses SSL for sending and receiving confidential messages. SSL does not support proxies in the way that clear text HTTP does in terms of protocol design, since an SSL connection is end-to-end. Only the original server on the remote end can do the necessary decryption and encryption for communication. Contrast with plain HTTP, which is easily handled by a server such as Squid or MS Proxy Server, because it takes requests as a server and makes them as a client. One possible approach to allow the iConnect Client System to connect to an HTTPS web server through a proxy server is to set per-IP basis security policies. Network Administrators do this by relaxing the security policies for accessing the iConnect web server at <https://www.iconnect.com.ph> and <https://www.iconnect.net.ph>.

B. File Name Patterns

Below are file name patterns with their respective examples and the corresponding targeted value of the sample file

	Filename Pattern	Sample File	Targeted Value
1	RC(\d{2})\d{4}\.txt	RC620623.txt	62
2	DLV\.(SC\d{4})\d{4}\d{2}	DLV.SC0093032840	SC0093
3	D\d{4}\d{4}\w\.zip	D04081604A.txt	- none -

1. File names starting with the letters "RC"; followed by 2 digits (denoted by **\d{2}**); followed by 4 digits (denoted by **\d{4}**) and ends with a ".txt" extension name are valid files for this pattern. The 2 digits (denoted by **(\d{2})**) is its targeted value.
2. File names starting with letters "DLV."; followed by the letters "SC"; followed by 4 digits (denoted by **\d{4}**); followed by another 4 digits (denoted by **\d{4}**); and ends with 2 digits (denoted by **\d{2}**) are valid files for this pattern. The letters "SC" followed by 4 digits (denoted by **(SC\d{4})**) is its targeted value.
3. Filenames starting with letter "D"; followed by 4 digits (denoted by **\d{4}**); followed by another digit; followed by a letter (denoted by **\w**) and ends with a ".zip" extension name are valid files for this pattern. No value is targeted.

Note:

In the iConnect Client, the targeted values are used as input values to a parameter. For example, when files are imported, these values identify the recipient of the files by matching them against the company codes listed in the Contact List.

Below are other syntax and definitions of file name patterns.

Characters	
<i>x</i>	The character <i>x</i>
<i>\\</i>	The backslash character
<i>\0n</i>	The character with octal value <i>0n</i> ($0 \leq n \leq 7$)
<i>\0nn</i>	The character with octal value <i>0nn</i> ($0 \leq n \leq 7$)
<i>\0mnn</i>	The character with octal value <i>0mnn</i> ($0 \leq m \leq 3, 0 \leq n \leq 7$)
<i>\xhh</i>	The character with hexadecimal value <i>0xhh</i>
<i>\uhhhh</i>	The character with hexadecimal value <i>0xhhhh</i>
<i>\t</i>	The tab character (' <i>\u0009</i> ')
<i>\n</i>	The newline (line feed) character (' <i>\u000A</i> ')
<i>\r</i>	The carriage-return character (' <i>\u000D</i> ')
<i>\f</i>	The form-feed character (' <i>\u000C</i> ')
<i>\a</i>	The alert (bell) character (' <i>\u0007</i> ')
<i>\e</i>	The escape character (' <i>\u001B</i> ')
<i>\cx</i>	The control character corresponding to <i>x</i>
Character classes	
[abc]	a, b, or c (simple class)
[^abc]	Any character except a, b, or c (negation)
[a-zA-Z]	a through z or A through Z, inclusive (range)
[a-d[m-p]]	a through d, or m through p: [a-dm-p] (union)
[a-z&&[def]]	d, e, or f (intersection)
[a-z&&[^bc]]	a through z, except for b and c: [ad-z] (subtraction)
[a-z&&[^m-p]]	a through z, and not m through p: [a-lq-z](subtraction)
Predefined character classes	
.	Any character (may or may not match line terminators)
\d	A digit: [0-9]
\D	A non-digit: [^0-9]
\s	A whitespace character: [\t\n\x0B\f\r]
\S	A non-whitespace character: [^\s]
\w	A word character: [a-zA-Z_0-9]
\W	A non-word character: [^\w]
POSIX character classes (US-ASCII only)	
\p{Lower}	A lower-case alphabetic character: [a-z]
\p{Upper}	An upper-case alphabetic character:[A-Z]
\p{ASCII}	All ASCII:[\x00-\x7F]

<code>\p{Alpha}</code>	An alphabetic character: <code>[\p{Lower}\p{Upper}]</code>
<code>\p{Digit}</code>	A decimal digit: <code>[0-9]</code>
<code>\p{Alnum}</code>	An alphanumeric character: <code>[\p{Alpha}\p{Digit}]</code>
<code>\p{Punct}</code>	Punctuation: One of <code>!"#\$%&'()*+,-./:;<=>?@[\]^_`{ }~</code>
<code>\p{Graph}</code>	A visible character: <code>[\p{Alnum}\p{Punct}]</code>
<code>\p{Print}</code>	A printable character: <code>[\p{Graph}]</code>
<code>\p{Blank}</code>	A space or a tab: <code>[\t]</code>
<code>\p{Cntrl}</code>	A control character: <code>[\x00-\x1F\x7F]</code>
<code>\p{XDigit}</code>	A hexadecimal digit: <code>[0-9a-fA-F]</code>
<code>\p{Space}</code>	A whitespace character: <code>[\t\n\x0B\f\r]</code>
Classes for Unicode blocks and categories	
<code>\p{InGreek}</code>	A character in the Greek block (simple block)
<code>\p{Lu}</code>	An uppercase letter (simple category)
<code>\p{Sc}</code>	A currency symbol
<code>\P{InGreek}</code>	Any character except one in the Greek block (negation)
<code>[\p{L} && [^ \p{Lu}]]</code>	Any letter except an uppercase letter (subtraction)
Boundary matchers	
<code>^</code>	The beginning of a line
<code>\$</code>	The end of a line
<code>\b</code>	A word boundary
<code>\B</code>	A non-word boundary
<code>\A</code>	The beginning of the input
<code>\G</code>	The end of the previous match
<code>\Z</code>	The end of the input but for the final terminator, if any
<code>\z</code>	The end of the input
Greedy quantifiers	
<code>X?</code>	X , once or not at all
<code>X*</code>	X , zero or more times
<code>X+</code>	X , one or more times
<code>X{n}</code>	X , exactly n times
<code>X{n,}</code>	X , at least n times
<code>X{n,m}</code>	X , at least n but not more than m times
Reluctant quantifiers	
<code>X??</code>	X , once or not at all

$X^*?$	X , zero or more times
$X^+?$	X , one or more times
$X\{n\}?$	X , exactly n times
$X\{n,\}?$	X , at least n times
$X\{n,m\}?$	X , at least n but not more than m times
Possessive quantifiers	
$X?+$	X , once or not at all
X^*+	X , zero or more times
X^++	X , one or more times
$X\{n\}^+$	X , exactly n times
$X\{n,\}^+$	X , at least n times
$X\{n,m\}^+$	X , at least n but not more than m times
Logical operators	
XY	X followed by Y
$X Y$	Either X or Y
(X)	X , as a capturing group
Back references	
$\backslash n$	Whatever the n^{th} capturing group matched
Quotation	
\backslash	Nothing, but quotes the following character
$\backslash Q$	Nothing, but quotes all characters until $\backslash E$
$\backslash E$	Nothing, but ends quoting started by $\backslash Q$
Special constructs (non-capturing)	
$(?:X)$	X , as a non-capturing group
$(?idsux-idmsux)$	Nothing, but turns match flags on - off
$(?idsux-idmsux:X)$	X , as a non-capturing group with the given flags on - off
$(?=X)$	X , via zero-width positive lookahead
$(?!X)$	X , via zero-width negative lookahead
$(?<=X)$	X , via zero-width positive lookbehind
$(?<!X)$	X , via zero-width negative lookbehind
$(?>X)$	X , as an independent, non-capturing group